BRITAIN'S LEADING HISTORICAL RAILWAY JOURNAL

BackTrack

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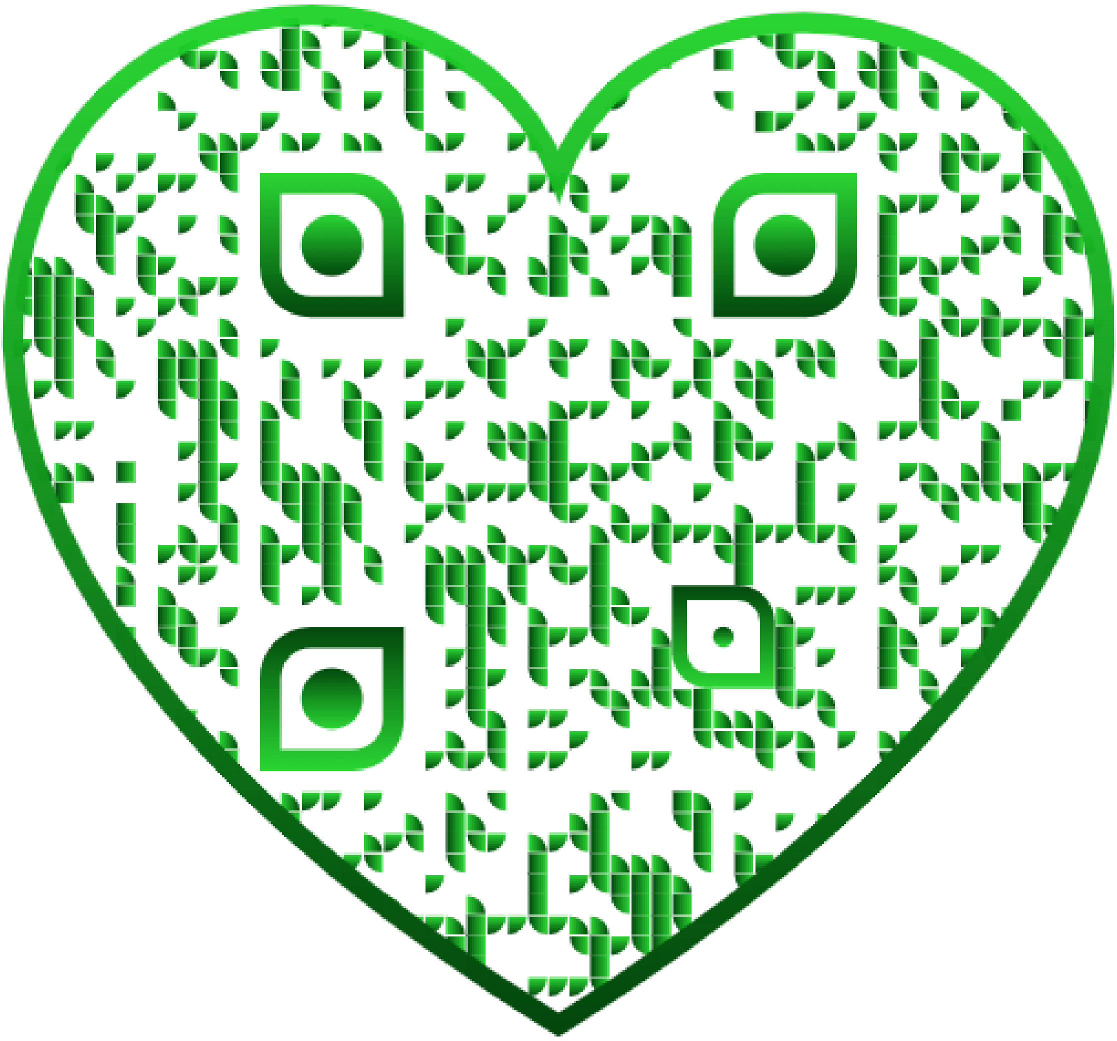

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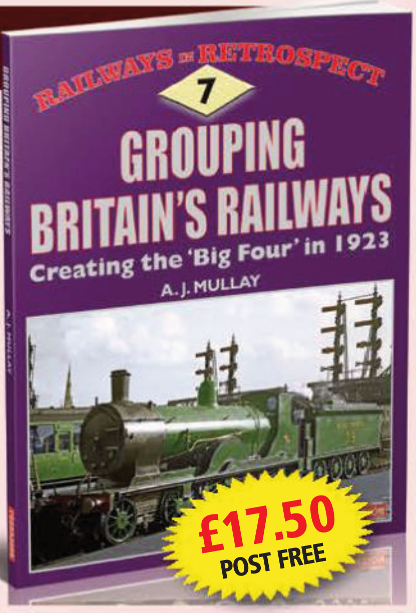

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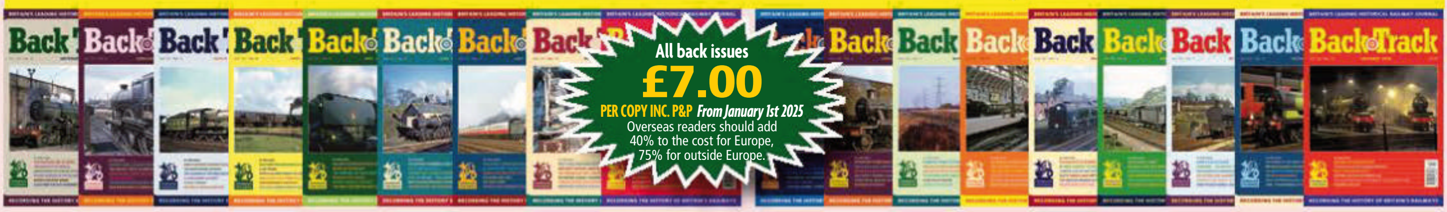

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Editorial
BackTrack
Vol. 39 · No. 8
No. 412
AUGUST 2025
RECORDING THE HISTORY OF BRITAIN'S RAILWAYS

North West reminiscences

A reflective guest editorial this month from a reader with a railway family background – and an editorial surprise for frustrated back issue collectors!

My first editorial for *Backtrack* appeared in the February 2016 edition, dealing with the history of the British Transport Police Dog Section and the British Transport Police's History Group. I am pleased to say that since then the History Group is going from strength to strength and our diligent committee members along with others have managed to rescue many artefacts relating to the BTP's long and distinguished history.

Being interested in railway history and preservation I have purchased every edition of *Backtrack* and look forward to receiving it each month. I find it a great reference source for our railway history. I am happy when there are excellent articles relating to the North West of England. I grew up in Hest Bank within site of the West Coast Main Line and I spent my spare time down at Hest Bank station and the surrounding area. Most of my family served on the railway in the North West and a couple of uncles worked on the footplate at Bescot.

I love looking at the pre-July 1962 photographs in the North West articles and often wonder if my paternal grandfather, a Carnforth-based footplateman, was the driver or one of my uncles was the fireman. Grandad joined the railway as a cleaner on the LNWR at Carnforth in 1915 and retired in July 1962. He would also work up to London Euston. One of my uncles was one of the drivers on the '15 Guinea' special on the 11th August 1968. Another uncle of mine was based at Lancaster Green Ayre and was one of the regular drivers on the Lancaster, Morecambe and Heysham electrics.

I attended Carnforth High School and along with a couple of other pupils I became a founder member of the school's railway club. We organised trips to the motive power depots in the area. If we went to Barrow, we were allowed to leave school at 15.00 hours instead of 15.30 hours to catch a train. Films for some of our meetings were hired from the British Transport Film Unit and were sent to the parcels' office at Carnforth. During the dinner break I used to go down to collect them and undertook some spotting at the same time. Thankfully, a lot of these films have themselves been preserved by the British Film Institute.

Just prior to the end of steam I was working as a volunteer at Steamtown, Carnforth. In 1970 was privileged enough to go to France with the late Dr. Peter Beet and others to assist in bringing back the French Pacific K22 which was to be preserved at Steamtown. A few months later I accompanied Dr. Beet to Hamburg to look at an 01 Pacific he was interested in preserving.

I had been allowed, through the good offices of the shed staff, a footplate trip from Carnforth to Barrow on the light engine which was to work the Whitehaven to Huddersfield postal train from Barrow. The locomotive, a 'Black Five', in the charge of Driver Ted Fothergill and Fireman Brian Tinkler, left at about 16.20 hours. Also on the footplate with us was Paul Barnes who at the time was in the process of making the 1968 film *Black Five*. This film recorded the poignant reminiscences of the enginemen who worked on the locomotives. At Barrow the locomotive was turned on the triangle at Salthouse Junction and then backed into a bay platform at Barrow station for an hour or so to await the train from Whitehaven. I then returned to Carnforth on the footplate. A memorable evening was had by all.

I often return to my old hunting ground and in my mind compare how things have changed at the stations and sidings, especially at Carnforth, and I must say not for the better. We must thank the staff and management of the Heritage Centre there for preserving the site for future generations. Also, we must thank the staff and volunteers of the Lakeside & Haverthwaite Railway for keeping the line running. In his later years as a driver this was one of my grandfather's regular runs, as well as to Leeds. I managed a couple of footplate trips with him.

As I mentioned in my previous editorial, we all must be eternally grateful to the authors who month by month painstakingly compile such authoritative and interesting articles to keep the history of our railways alive for future generations.

***Bill Rogerson* MBE**

Treasure trove found – BT 34/4!

In March 2020 the forthcoming April issue was printed on time and distributed to the usual sales outlets but hardly had that happened than the Covid plague broke out, lockdown was enforced and all but essential shops closed for the duration. I know that a good few readers who buy *Backtrack* over the counter were consequently unable to obtain a copy. We recovered as many as we could from the printers but the available supply was soon exhausted in postal sales and that was that. When stores were able to reopen, the remaining stocks of magazines were cleared from their shelves to make way for the new latest ones and, though we did try to recover some, that didn't prove possible and unfortunately most of Vol.34 No.4 went for pulping, that issue thus becoming a rarity.

Now in clearing stocks following our spring sale of Vols.33 and 34, a small unopened and, as it turned out, wrongly labelled box came to light and on investigating within it was found to contain some last copies sent by the Amadeus Press of the April 2020 magazine – the one with the blue 'Deltic' prototype on the cover and the *second* part of the Scarborough locoshed article! So it comes to pass that we have a few copies of 34/4 suddenly available – and it is only a few, a dozen or so – which we can offer at our usual back issue rate of £7 on a first-come first-served basis. For these we are taking telephone orders and card payments only. Off you go...! **Ed.**

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Spanning generations at Waterloo station on 30th August 1961: SR 'West Country' 4-6-2 No.34006 *Bude* with a Southampton boat train and LSWR M7 0-4-4T No.30052 on station pilot duty. (Colour-Rail.com 341370)

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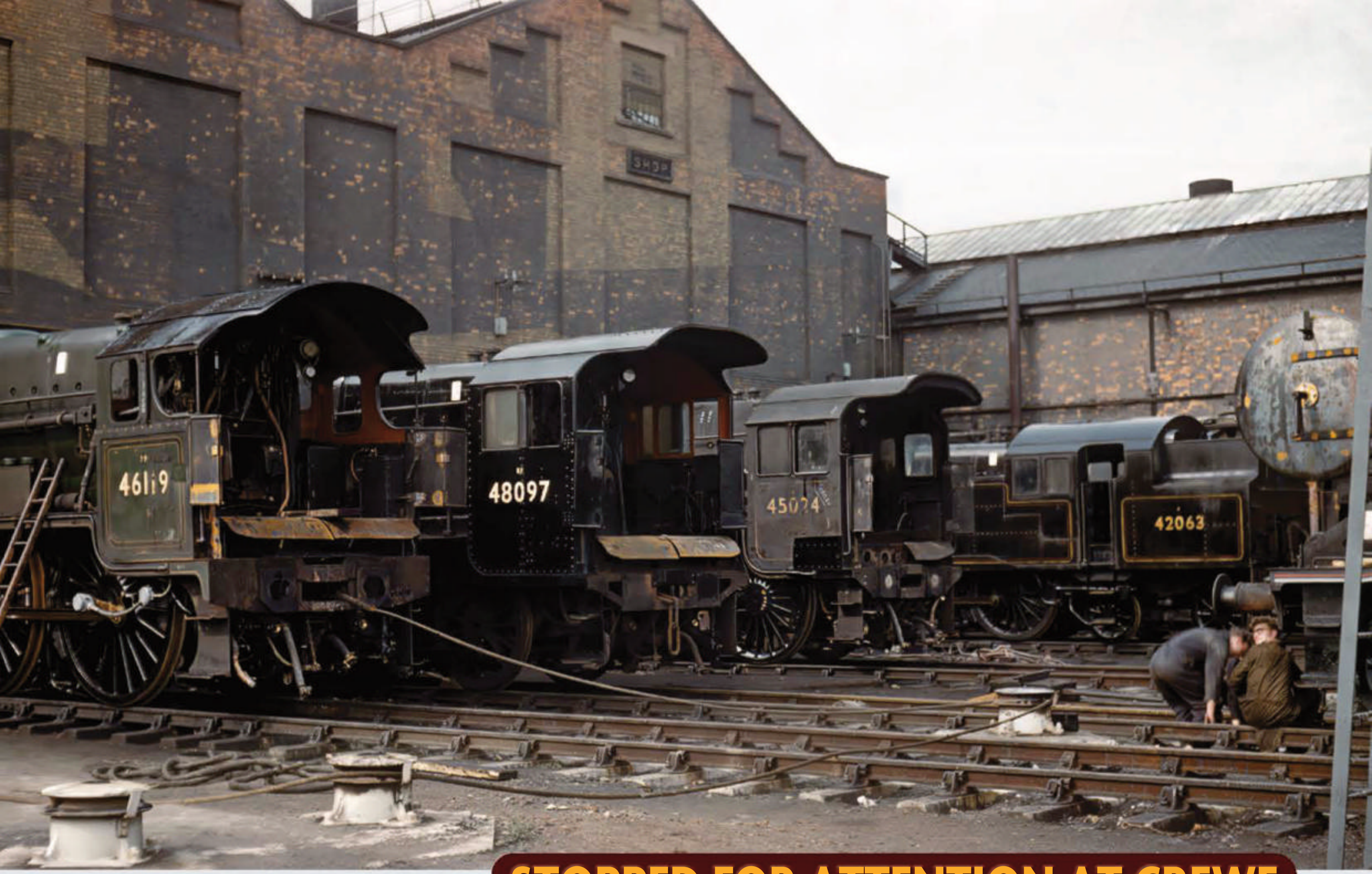


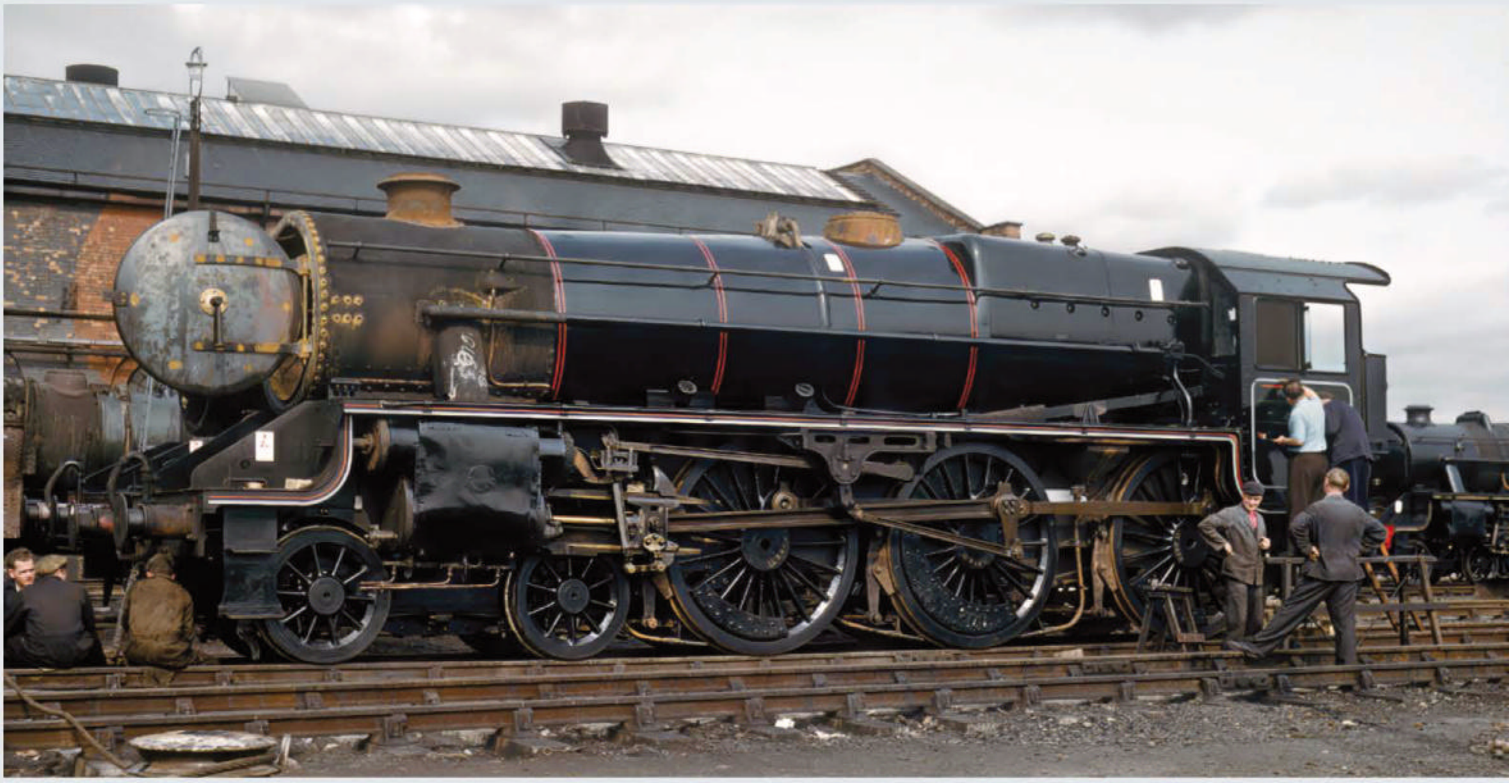
STOPPED FOR ATTENTION AT CREWE

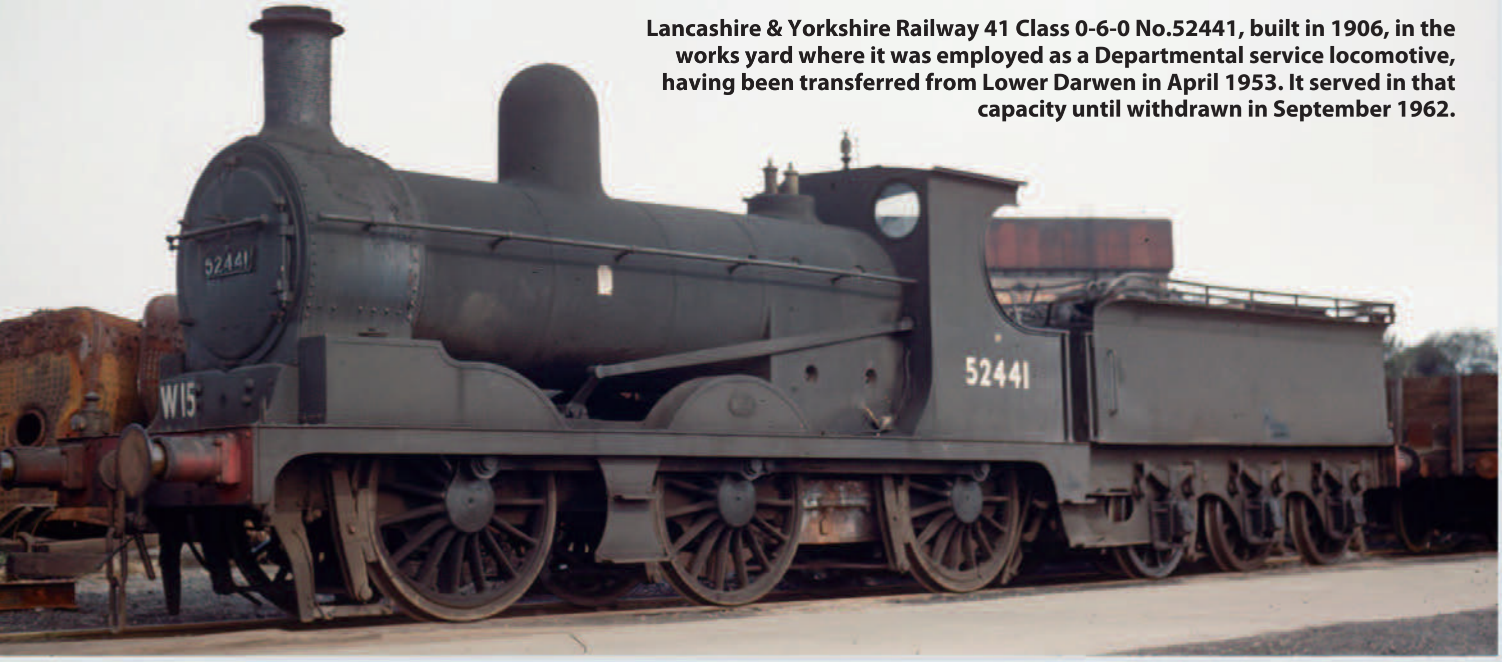
TOMMY TOMALIN visited Crewe Works on Sunday 27th August 1961 and photographed some of the locomotives which were there on that date for attention.

ABOVE: **LMS motive power in the works yard that afternoon included 'Royal Scot' 4-6-0 No.46119 *Lancashire Fusilier* (from Edge Hill shed, Liverpool), 8F 2-8-0 No.48097 (from Kirkby-in-Ashfield, repainted), Class 5 4-6-0 No.45024 (from Preston, undergoing surgery) and Class 4 Fairburn 2-6-4T No.42063 (from Southport).**

BELOW: **A Class 5 4-6-0 has progressed to the repainting stage. The boiler has been repainted and lined out, though work remains to be completed at the smokebox end and the cylinder cover seems to need some dents knocking out. The signwriter is at work on the cab-side lining but the numerals are still to be applied – so unfortunately we don't know the engine's identity!**

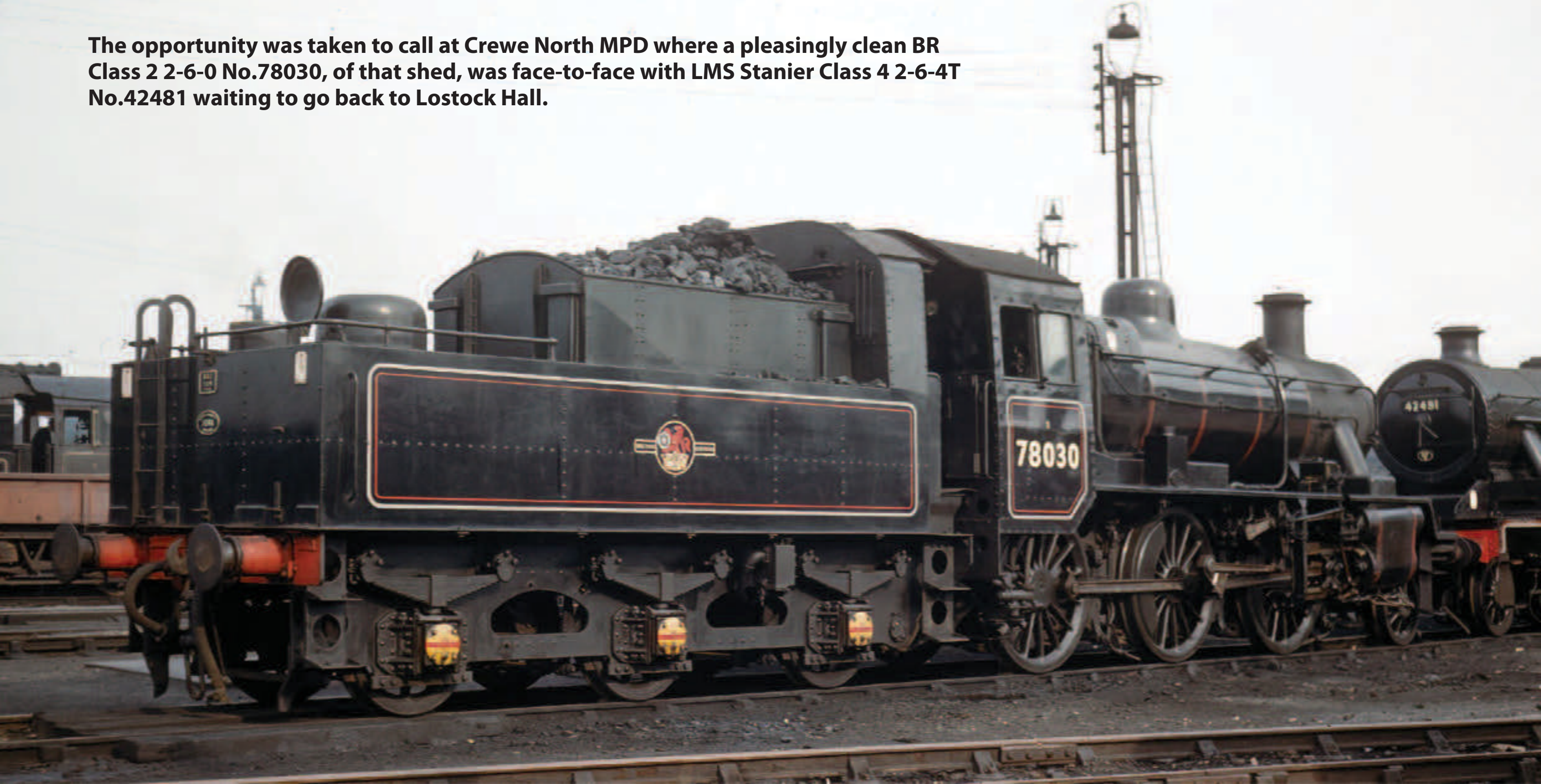
OPPOSITE, TOP: **The scene inside the repair shop appears a bit chaotic but is surely deceptively well organised. Various 'patients' are undergoing attention but none was individually identified by the photographer, though a component on the floor is marked as belonging to No.78056, a Standard Class 2 from Rhyl. A sweeper-up is gainfully occupied.**

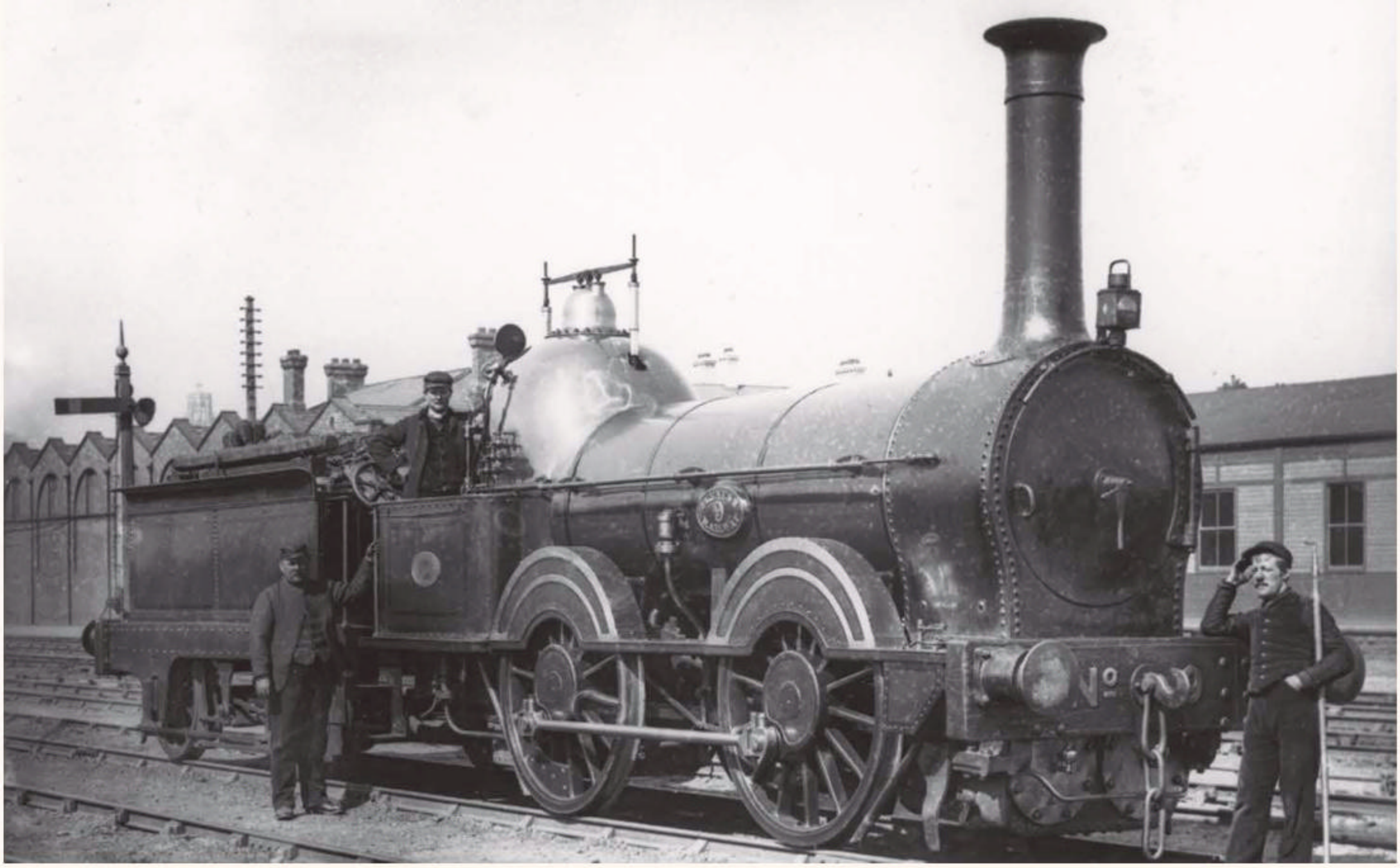




Lancashire & Yorkshire Railway 41 Class 0-6-0 No.52441, built in 1906, in the works yard where it was employed as a Departmental service locomotive, having been transferred from Lower Darwen in April 1953. It served in that capacity until withdrawn in September 1962.

The opportunity was taken to call at Crewe North MPD where a pleasingly clean BR Class 2 2-6-0 No.78030, of that shed, was face-to-face with LMS Stanier Class 4 2-6-4T No.42481 waiting to go back to Lostock Hall.



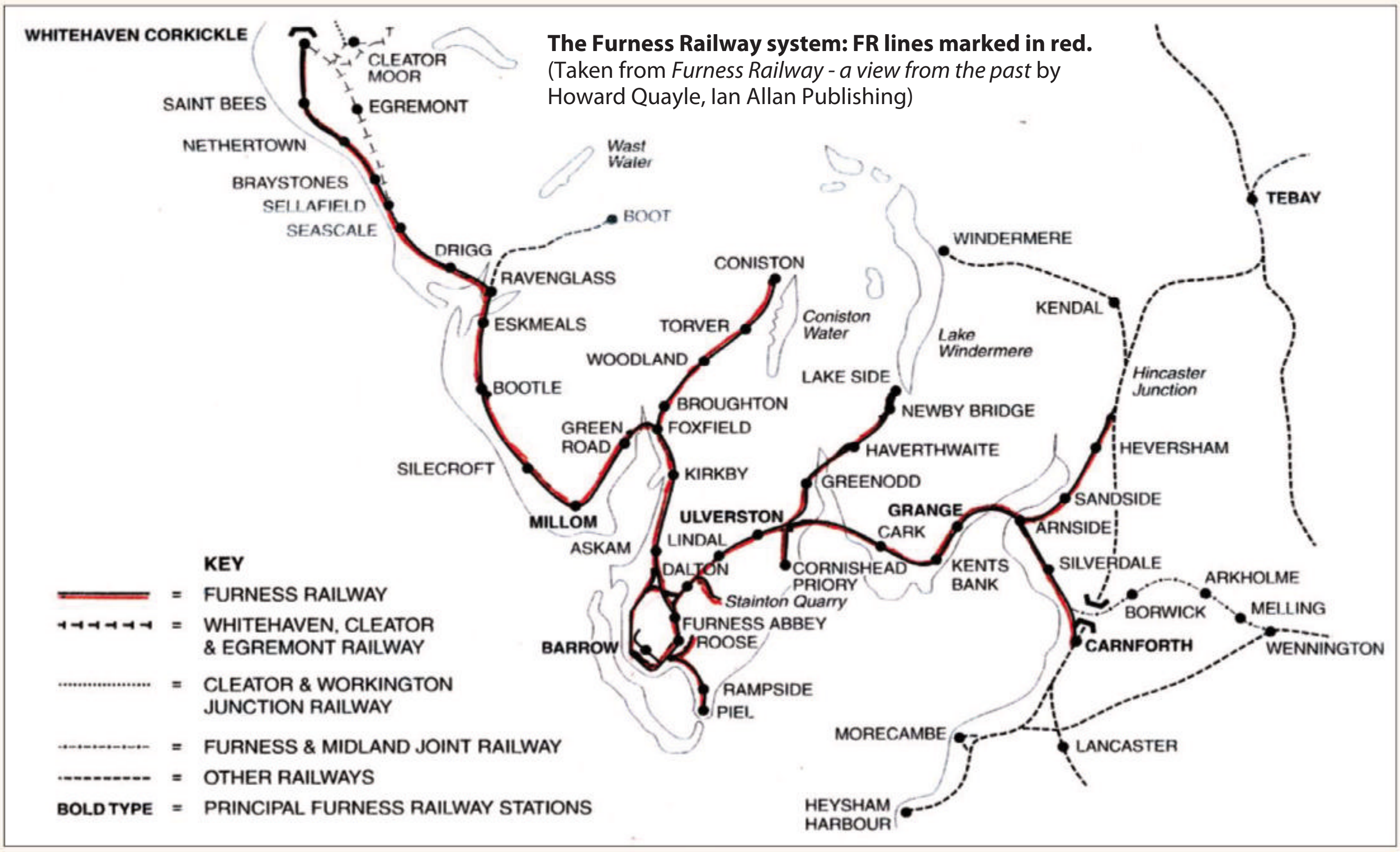


Following the delivery of the initial order of 0-4-0s Nos.1, 2, 3 and 4 from Bury, Curtis & Kennedy in 1844/6, a further four of a similar design, Nos.7-10 built by W. Fairbairn, were delivered to the FR in 1854/5. No.9 is seen outside the old Barrow Town station c1886. The engine had low-hung inside cylinders and bar frames. The firebox was of the 'haystack' type, its top made of polished copper and hemispherical in shape, while the chimney was tall and slender with a copper top. No protection was given to the engine crew. The underframes of the tender were of oak construction. Running for around 40 years, the 0-4-0s were withdrawn by 1901 and sold to the Barrow Haematite Co. where they were rebuilt as saddle tanks.

THE FURNESS RA
1846-1921

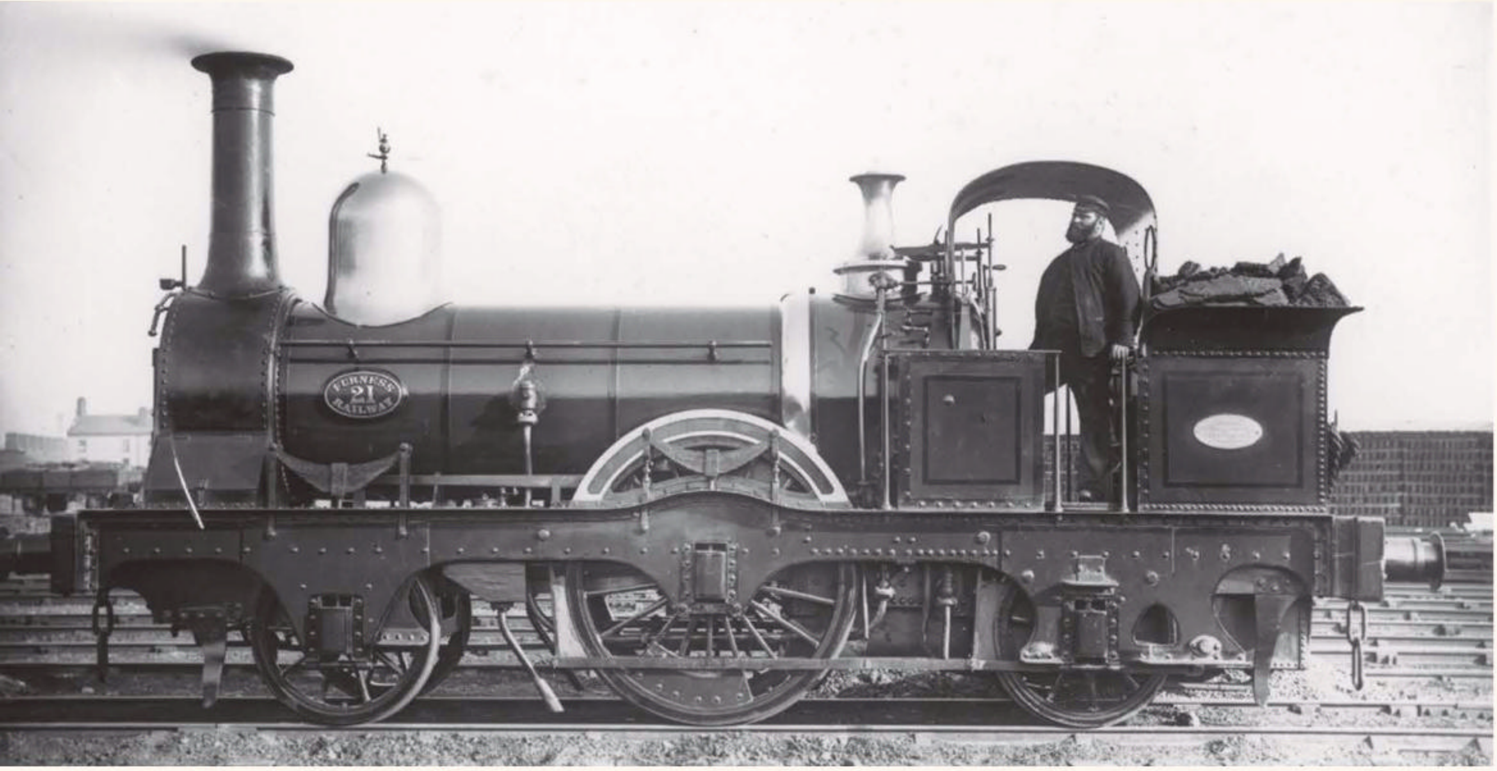
BY DAVID ANDERSON

From its humble origins as a mineral line for the transport of local supplies of iron ore and slate from the West Cumberland quarries to South Wales, the Furness Railway grew into a thriving company which controlled not only the region's railways but also the vast docks, shipyards and industries around Barrow which in the early 1840s was only a small hamlet surrounding a sheltered harbour. The Furness district of Lancashire, now part of Cumbria, is one of the country's most isolated regions bounded by the Lake District in the north and extending to the west coast at Morecambe Bay. The area's rugged landscape prevented the rapid growth of



The Furness Railway system: FR lines marked in red.
(Taken from *Furness Railway - a view from the past* by Howard Quayle, Ian Allan Publishing)

WHITEHAVEN CORKICKLE
CLEATOR MOOR
SAINT BEES
EGREMONT
NETHERTOWN
BRAYSTONES
SELLAFIELD
SEASCALE
Wast Water
BOOT
TEBAY
DRIGG
RAVENGLASS
CONISTON
WINDERMERE
KENDAL
ESKMEALS
TORVER
Coniston Water
Lake Windermere
WOODLAND
LAKE SIDE
Hincaster Junction
BOOTLE
BROUGHTON
FOXFIELD
NEWBY BRIDGE
GREEN ROAD
HAVERTHWAITE
HEVERSHAM
SILECROFT
KIRKBY
GREENODD
SANDSIDE
MILLOM
ULVERSTON
GRANGE
CARK
ARNSIDE
ASKAM
LINDAL
DALTON
CORNISHEAD PRIORY
KENTS BANK
SILVERDALE
ARKHOLME
Stainton Quarry
BORWICK
MELLING
FURNESS ABBEY
BARROW
ROOSE
CARNFORTH
WENNINGTON
RAMPSIDE
PIEL
MORECAMBE
LANCASTER
HEYSHAM HARBOUR
KEY
= FURNESS RAILWAY
= WHITEHAVEN, CLEATOR & EGREMONT RAILWAY
= CLEATOR & WORKINGTON JUNCTION RAILWAY
= FURNESS & MIDLAND JOINT RAILWAY
= OTHER RAILWAYS
BOLD TYPE = PRINCIPAL FURNESS RAILWAY STATIONS



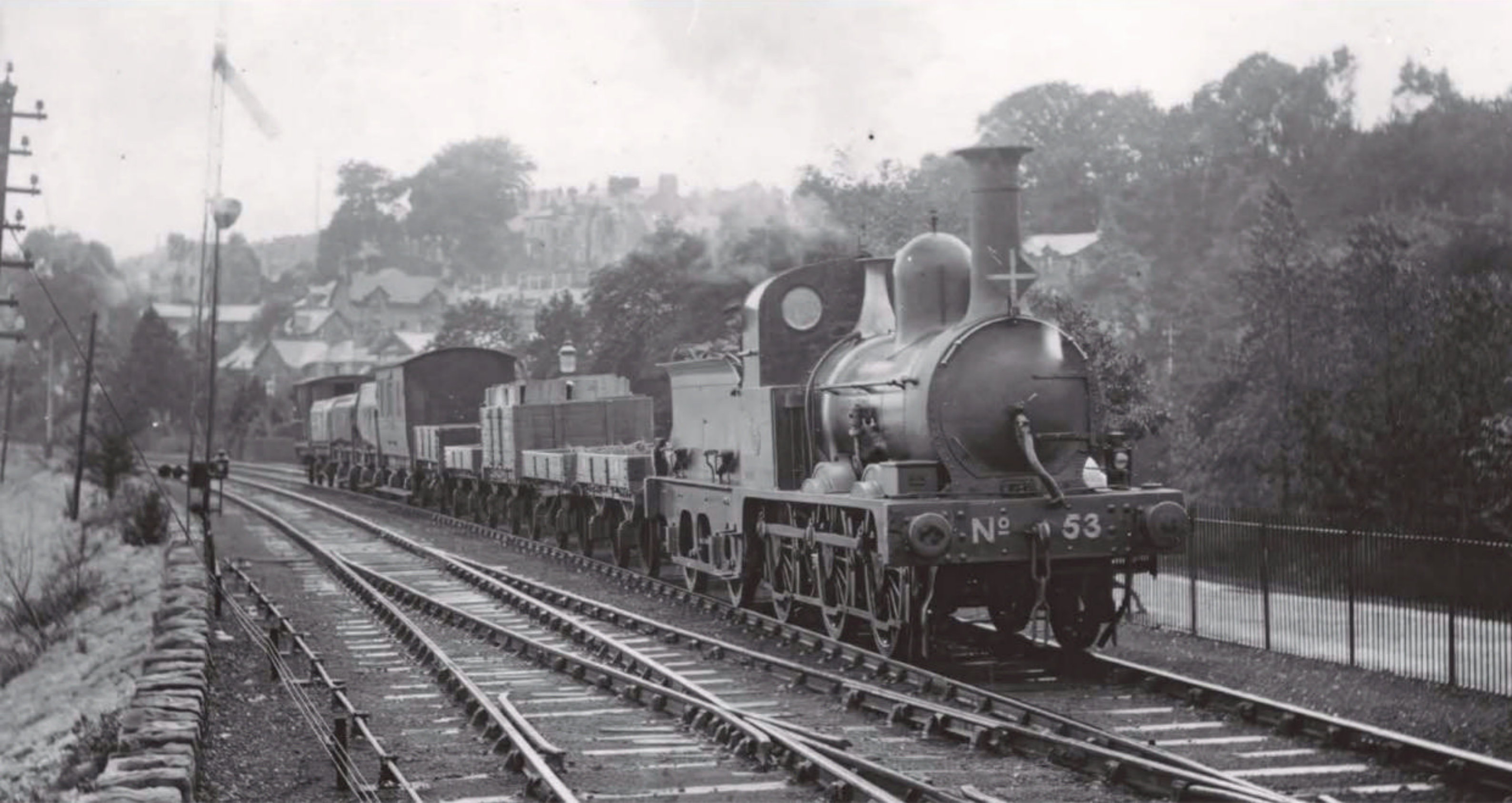
AILWAY AND ITS LOCOMOTIVES

FR 2-2-2WT No.21 was one of a series of the largest well tanks to be operated by the company. Built by Sharp, Stewart & Co. in 1864, only a primitive bent metal weatherboard was provided for the crew. By 1870 the ever-growing loads were beyond their power and by 1898 they had been taken out of operation.

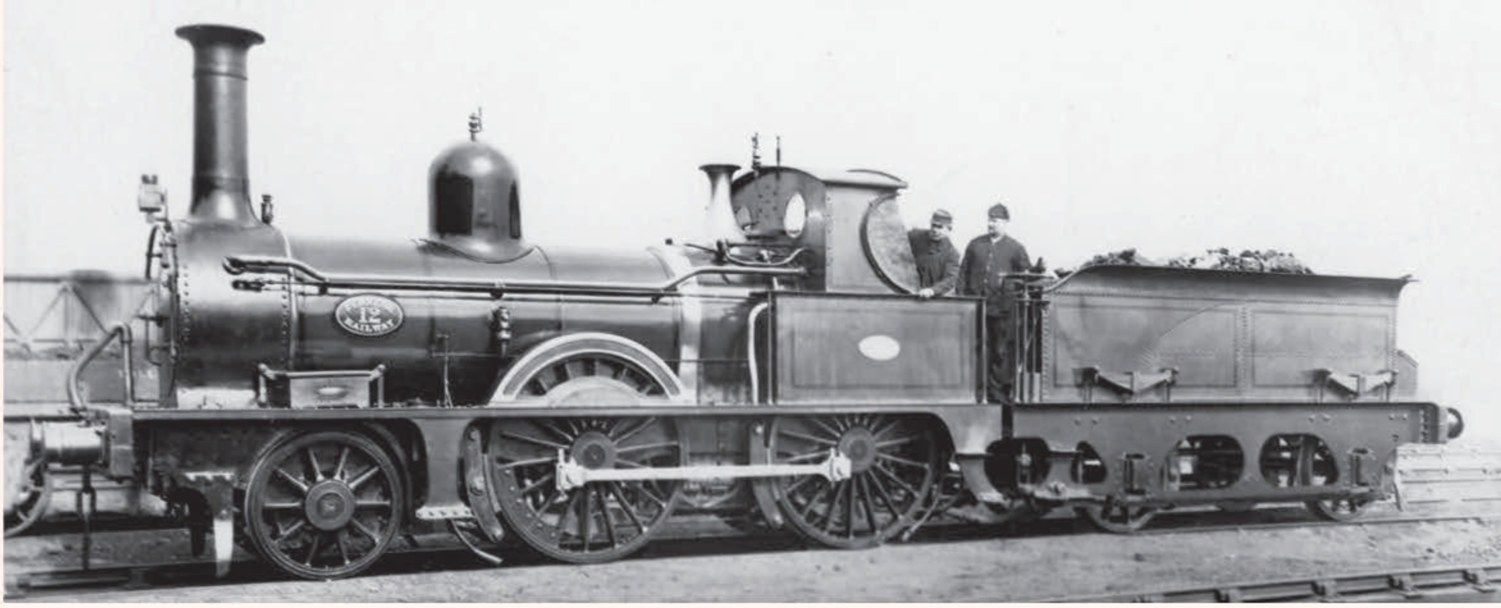
the railway's major trade routes.

The first section of the Furness Railway was authorised in May 1844 to run from Kirkby-in-Furness to Barrow with branches to Dalton and Rampside where shipping services connected to Fleetwood from the privately-owned Piel Pier. Despite opposition, including objections from the poet William Wordsworth that the new railway would spoil the area's scenic attraction especially around Furness Abbey, the Furness Railway was opened for mineral traffic on 3rd June 1846 and for passengers two months later. No record appears to exist of an official ceremony to celebrate the occasion. For use during the line's construction, 0-4-0 locomotives Nos.1 and 2 were delivered from the Liverpool company of Bury, Curtis and Kennedy by sea from Fleetwood, the first locomotives to be operated by the Furness Railway.

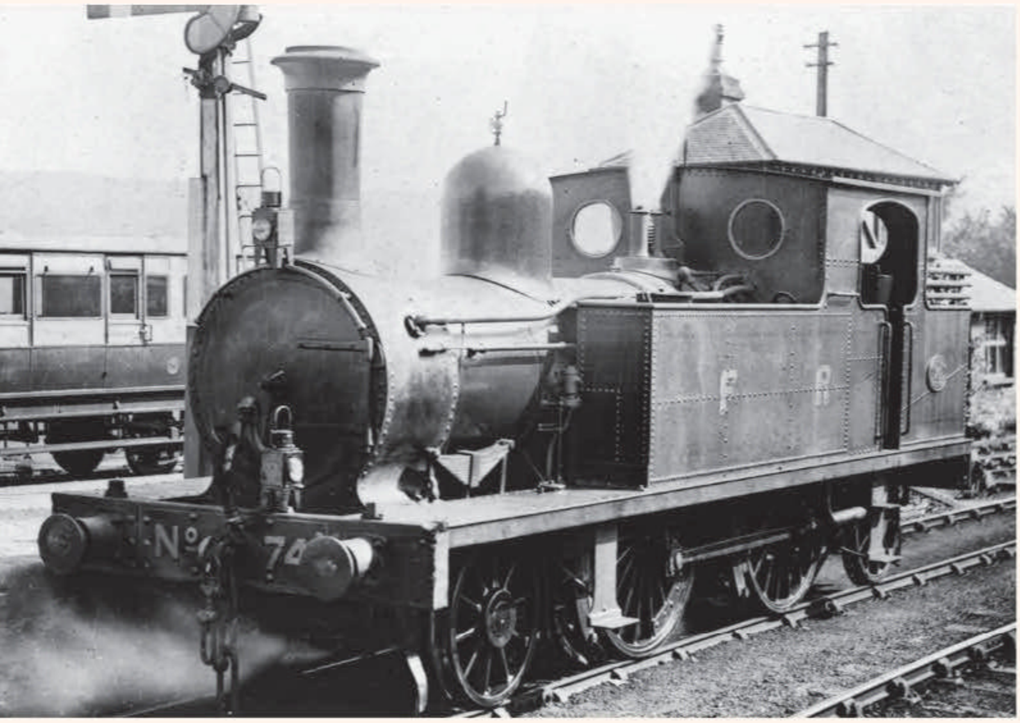
By 1848, an extension of the railway was completed northwards between Kirkby and Broughton and Whitehaven was reached in 1866 when the Furness Railway purchased the Whitehaven & Furness Junction Railway, whilst a further acquisition of the Ulverston & Lancaster Railway in 1851 gave the company a 74-mile-long main line to connect with the London & North Western Railway's route at Carnforth. Further take-overs in 1862 led to the ownership and operation of the Coniston Railway from Broughton to the head of the lake at Coniston. A connection was provided to the Midland Railway by the opening of the



Built by Sharp, Stewart in 1871, 0-6-0 No.53 heads an up mixed freight near Grange-over-Sands between Ulverston and Arnside c1900.



A class of 19 2-4-0 engines was built between 1870 and 1882 by Sharp, Stewart & Co., seven of which were converted to 2-4-2Ts in 1891 for branch line work. No.12 was one of a class locomotives identical to those in operation on the Cambrian Railways at this time. The 2-4-0s became the standard passenger engines of the FR. Displaced from top link work, the class was replaced by the first of the FR 4-4-0 designs. No.12 was withdrawn in 1920.



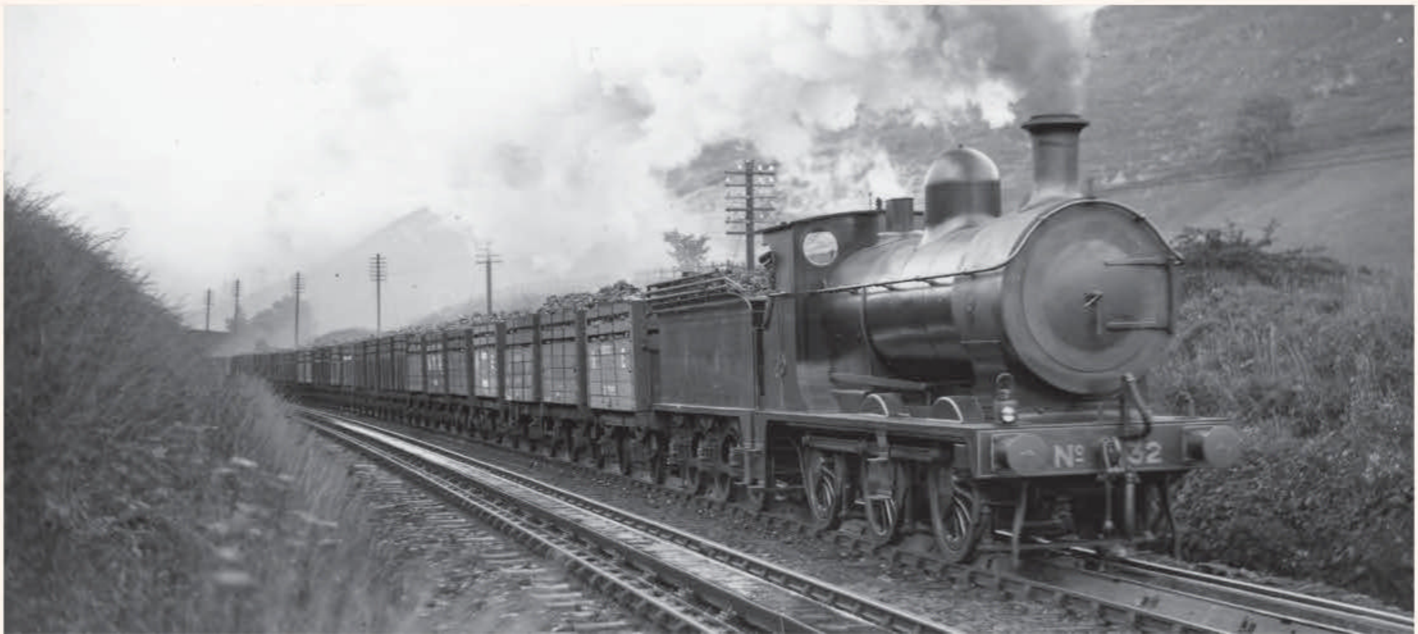
Converted in 1891 from a 2-4-0 tender locomotive, 2-4-2T No.74 is seen at Windermere station. Their duties were mainly on the Lakeside branches, in the Kendal and Morecambe areas and around Cleator. No.74 was withdrawn in 1921.

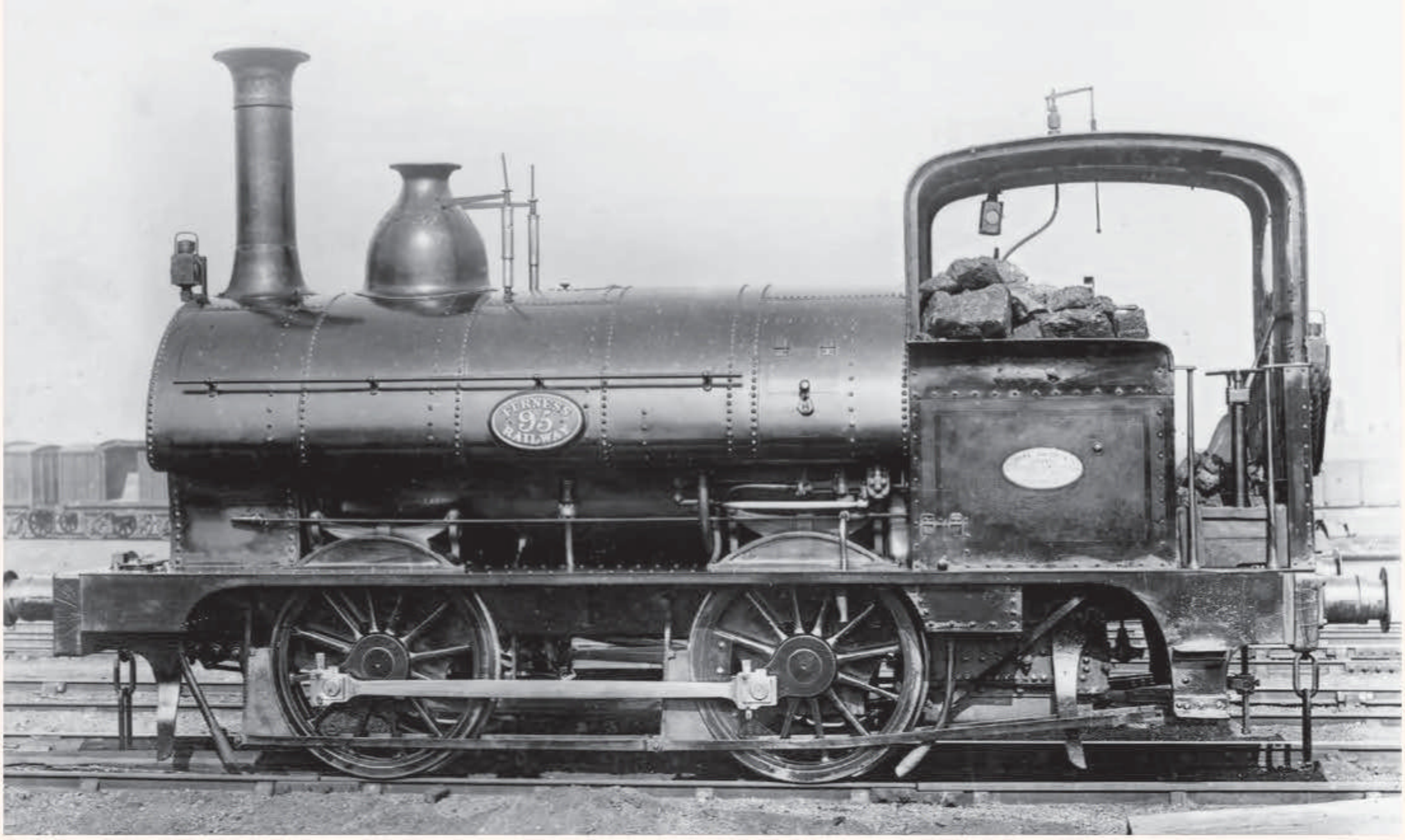
Furness & Midland Joint Railway between Carnforth and Wennington.

Later expansion included the opening of the tourist Lakeside branch in 1869 together with a variety of mineral railway branches to handle iron ore traffic. A branch line from Arnside to Hincaster Junction, which connected with the main West Coast route between Milnthorpe and Oxenholme, was built to speed up the journey times of the coke trains which worked between County Durham and the Furness ironworks via Stainmore and Tebay. This line gave the Furness Railway running rights to operate passenger services as far as Kendal on the Windermere branch of the London & North Western Railway.

The Furness Railway also had consider-able maritime interests in its area of operation including steamer sailings from Piel on Roa Island to the Isle of Man, a service inaugurated in 1867, and also sea crossings to Belfast in 1881. These routes

Hauling a heavy Tebay–Barrow coke train consisting of North Eastern Railway wagons, FR 0-6-0 No.32 (built by the North British Locomotive Co. in 1920) runs through the scenic Lune Gorge and over Dillicar water troughs on the West Coast Main Line. This class was W. Pettigrew's standard locomotive type designed mainly for shunting work; No.32 survived well into the LMSR and BR eras, becoming BR 3F No.52509 before withdrawal in 1957.





were transferred to Ramsden Dock, Barrow, where a new central station was opened on 1st June 1882. This maritime traffic declined with the opening of the Heysham Harbour facilities in 1904, although steamer sailings across Morecambe Bay to Fleetwood and Southport continued until the outbreak of the first World War.

In May 1941 a German bombing raid destroyed Barrow station and also damaged the glass cage adjoining Platform 1 where the 0-4-0 'Coppernob' was preserved, after which the historic engine was moved to Horwich for safe-keeping and later for display at the National Railway Museum, York.

The British steel industry prospered greatly in the Furness region during the 1870s and 1880s but the end of the monopoly of haematite-based steel was the start of the area's industrial decline.

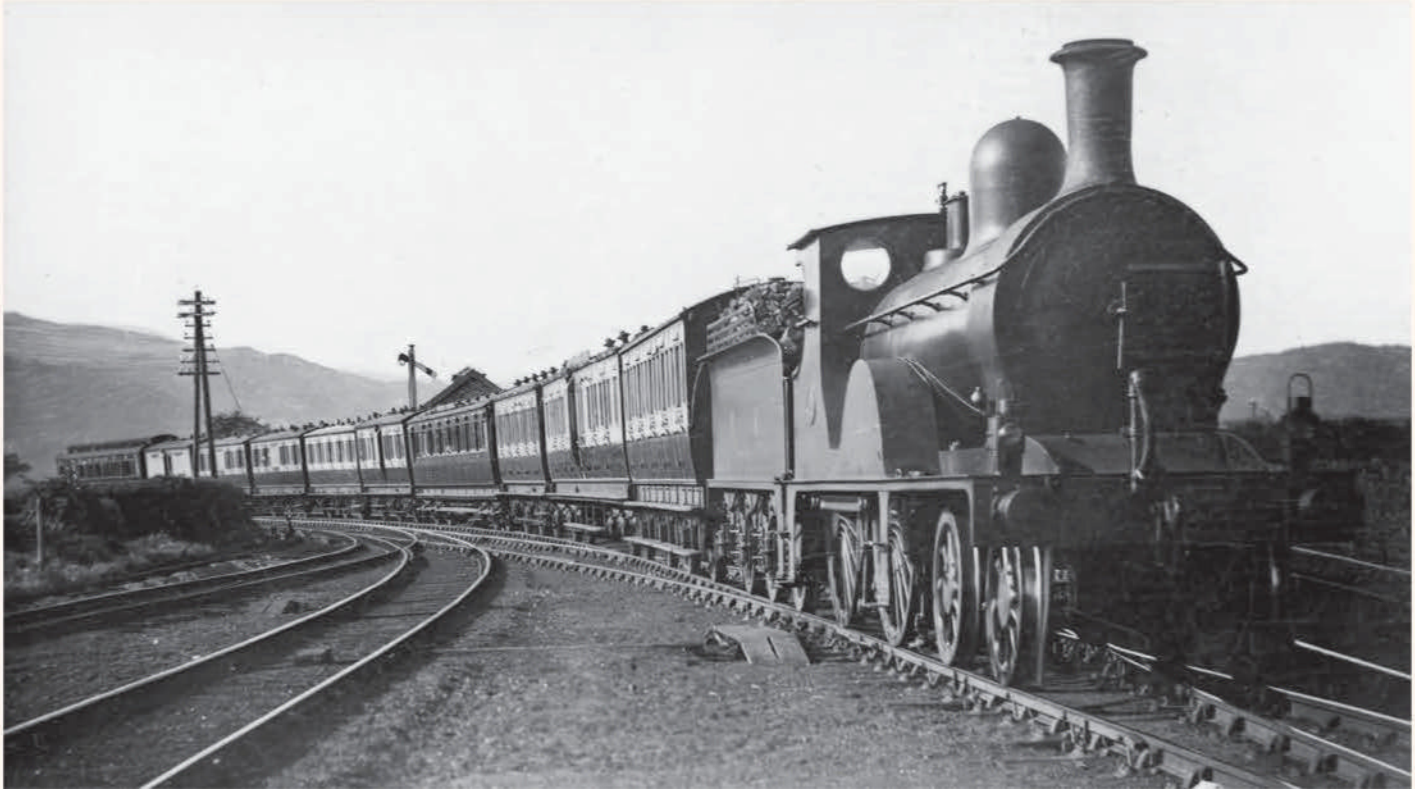
However, to compensate for this loss of trade, the Furness Railway embarked on an imaginative promotion of the region's tourist potential with the introduction of railway and steamer excursions and circular tours within the Lake District. This brought financial success to the Furness Railway Company apart from the possible development of the town of Seascale as a holiday resort which was never fully realised.

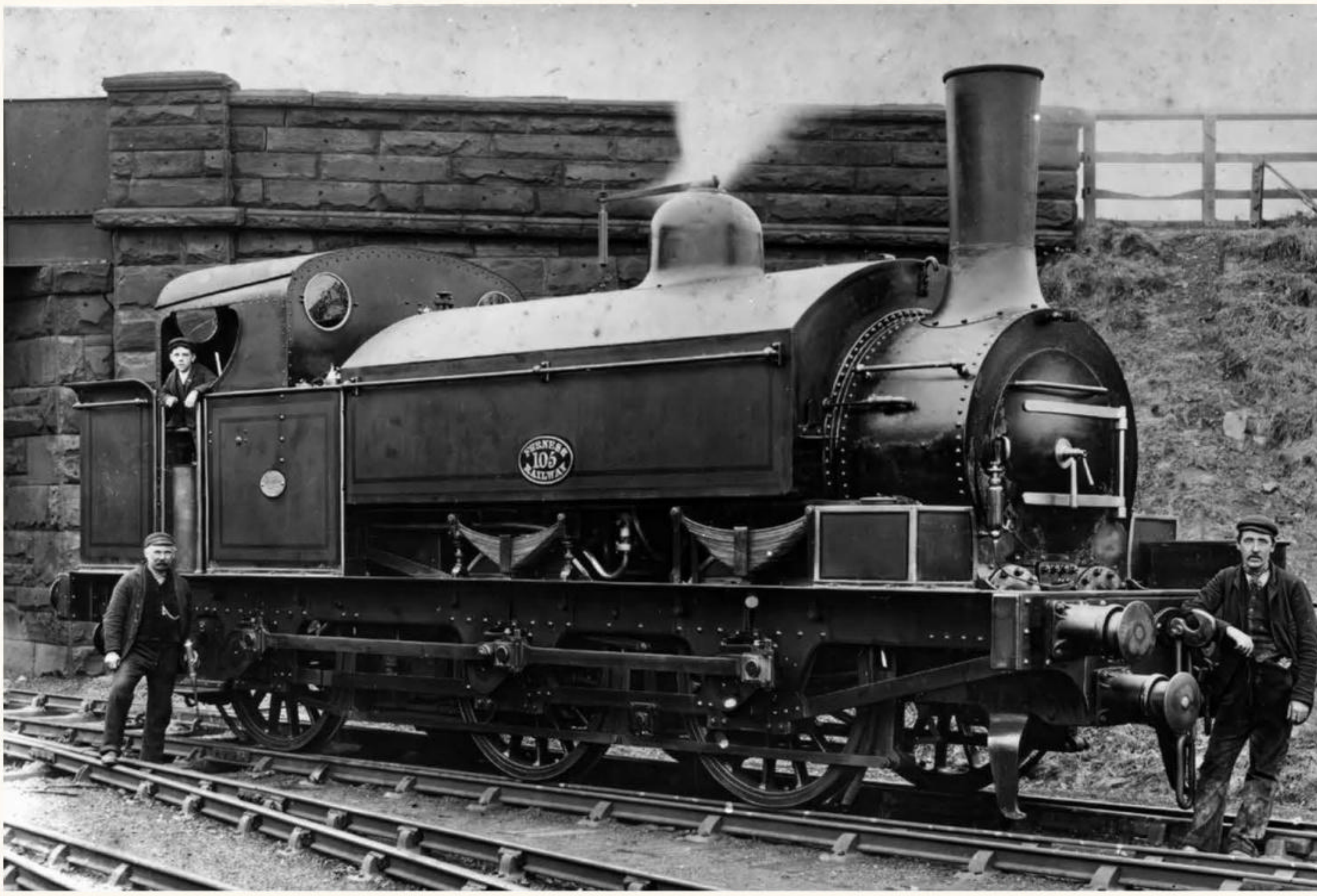
The construction of locomotives for the Furness Railway ranged from its first order for two 0-4-0 tender engines delivered in 1846 from the Liverpool company Bury, Curtis and Kennedy to the final design of five of the impressive 4-6-4 'Baltic Tanks' from Kitson & Company in 1920/1.

Throughout its history the railway relied on outside contractors for its locomotives mainly from the firms of Sharp, Stewart & Company, the North British Locomotive

A second series of six 0-4-0 saddle tanks was built by Sharp, Stewart in 1874 for working the Barrow dockside lines and local mineral branches. No.95 was photographed in the Barrow docks area c1880. Unlike the earlier engines, the saddle tank carried a dome behind the elegant chimney.

FR 4-4-0 No.127 (Sharp, Stewart & Co., 1901) approaches Foxfield with a Whitehaven to Carnforth passenger working consisting of a varied selection of coaching stock. The Pettigrew-designed 4-4-0 with the 6ft 6in diameter driving wheels became LMS No.10144. The class of four engines was scrapped in 1930/1. The 4-4-0s showed some features of Adams's engines on the London & South Western Railway – Pettigrew had been Adams's assistant on the Great Eastern Railway and on the LSWR at Nine Elms.



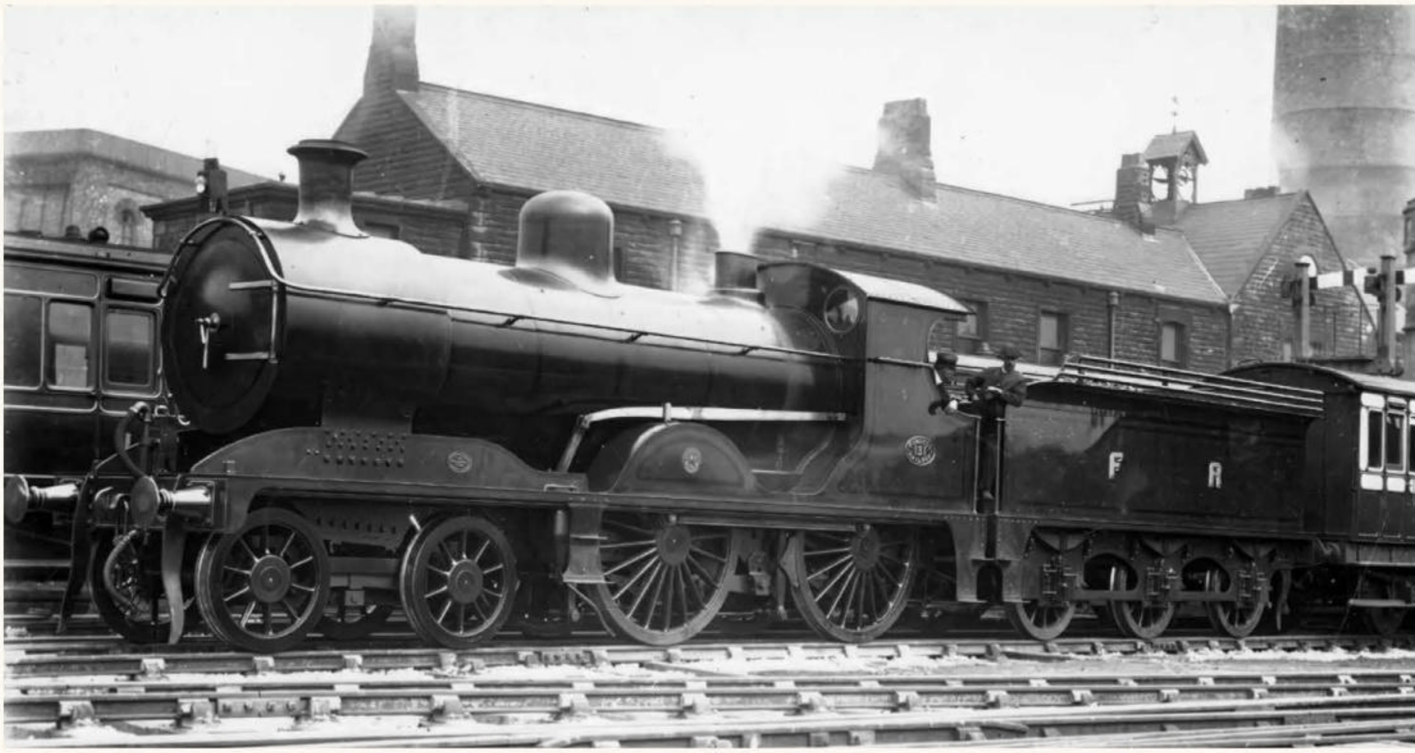


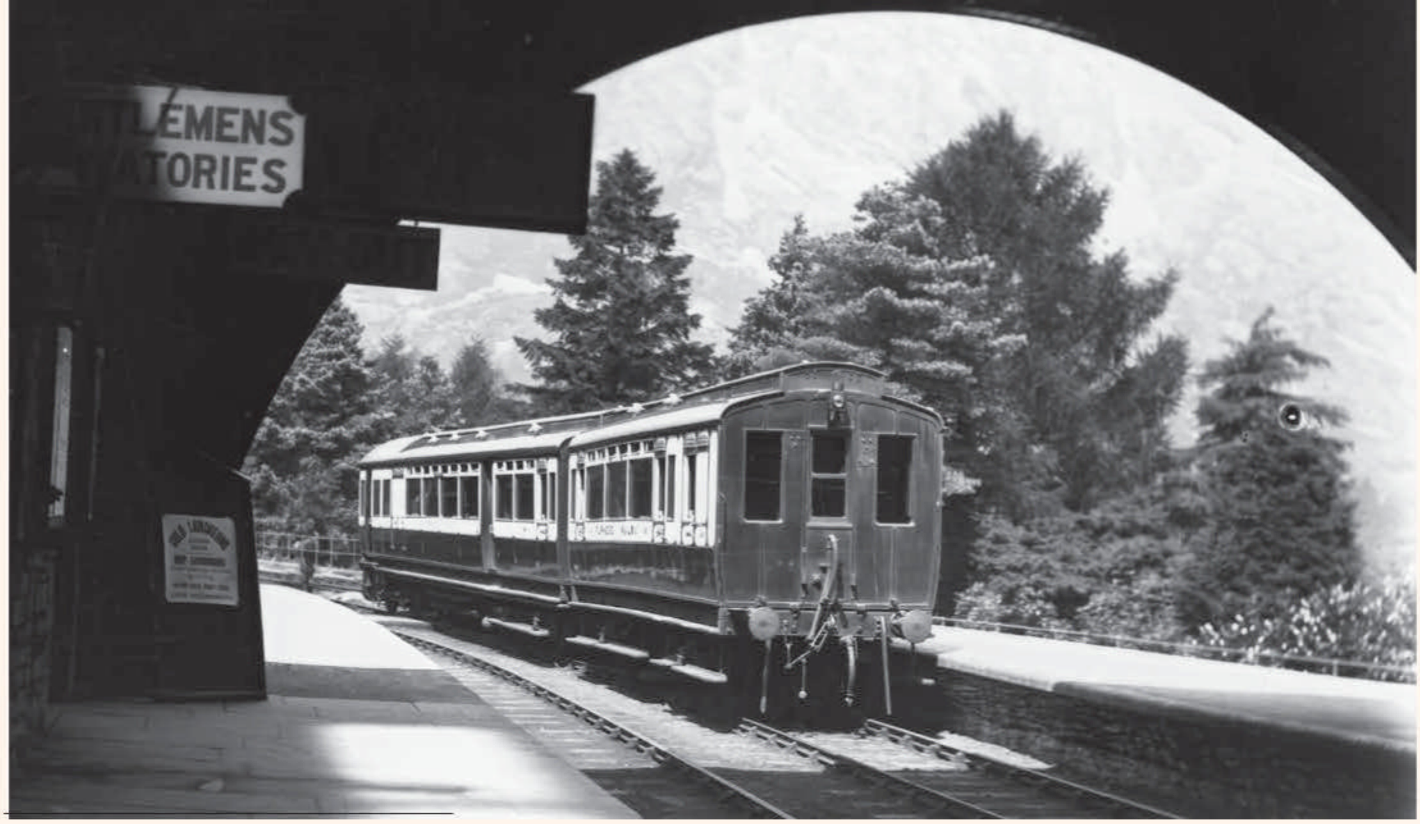
Formerly Whitehaven, Cleator & Egremont Railway 0-6-0ST No.9 *Loweswater,* immaculate in lined-out livery and now FR No.105, seen during shunting duties at Gillfoot, a short distance to the north of Egremont. Note the squared-off saddle tank, the large cab occupied by a young lad and two sets of buffers for handling conventional and chauldron-type wagons. Withdrawn in 1921.

The powerful Pettigrew-designed Furness Railway 4-4-0s Nos.130-133, the final development of this type, worked the Barrow to London Euston through passenger trains as far as Lancaster where the LNWR took over. Built by the North British Loco. Co. in 1914, No.131 is seen at Carnforth. Due to their weight, the FR civil engineer took some exception to their use over the section north of Barrow. As LMS No.10186 this 4-4-0 was withdrawn in 1932.

Company, R. & W. Hawthorn and Kitson & Company.

The Furness Railway eventually operated a total stock of 242 engines including the early 0-4-0s, 2-2-2 well tanks, 2-4-0 tender engines, 0-6-2Ts, 4-4-2Ts, 4-6-4Ts, 4-6-4 'Baltic Tanks' and a large number of 0-6-0 tender engines for general freight work and the haulage of mineral trains in the Dolton and Lindal areas. Engines were also acquired from the constituent companies – the Whitehaven, Cleator & Egremont





Framed by the station's overbridge, the FR steam railmotor car and four-wheel trailer No.1 are pictured at Coniston station's Platform 2. Designed by W. Pettigrew for the Coniston and Lakeside branches, two units were built, the only engines to be constructed at the Barrow Works. The units had outside cylinders and Walschaerts valve gear and the coaches 36 third class and twelve first class passengers. Water was carried in a tank below the boiler and coal on the footplate. At the rear was a small guard's compartment which housed a set of controls for reverse running. Vibration remained a problem and after nine years' service, No.1 unit was withdrawn around 1914.

Railway and the Whitehaven & Furness Junction Railway.

For identification, the Furness Railway engines were classified by their allotted numbers and apart from the 0-4-0 nicknamed 'Coppernob' and a few of the locomotives taken over from the early railway companies, none of its engines carried names. The livery of the Furness Railway engines was described as 'Indian Red' with the abbreviated initials F R on tenders and cab-sides. Brass number plates were oval in shape and were affixed to either the sides of the boiler or cab-sides.

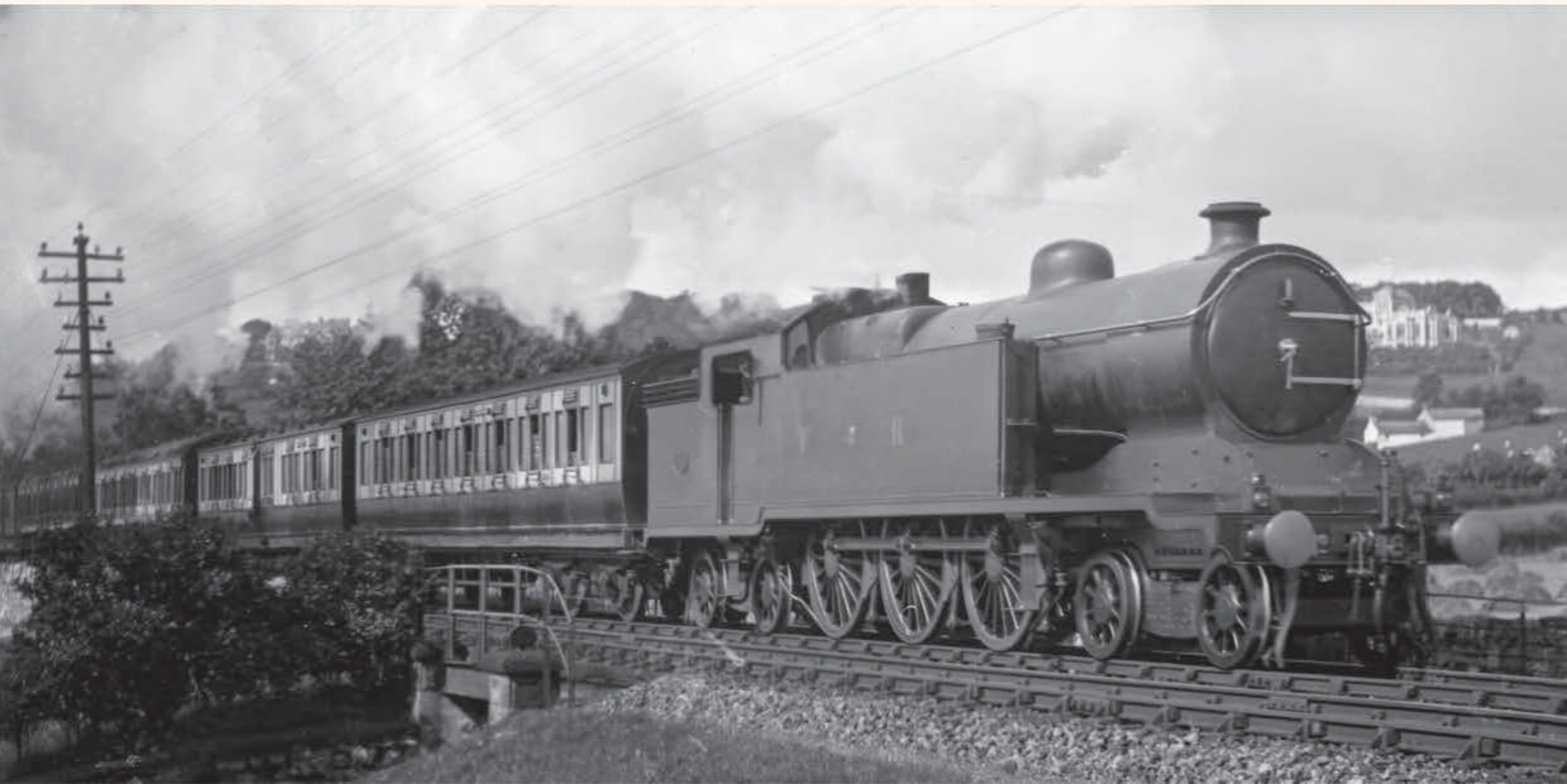
At the 1923 grouping, a total of 136 former Furness Railway locomotives, mostly freight types, was taken into London Midland & Scottish Railway ownership.

The last Furness Railway locomotive 0-6-0 No.52510 (FR No.33) survived into the British Railways era until withdrawal from service in 1956.

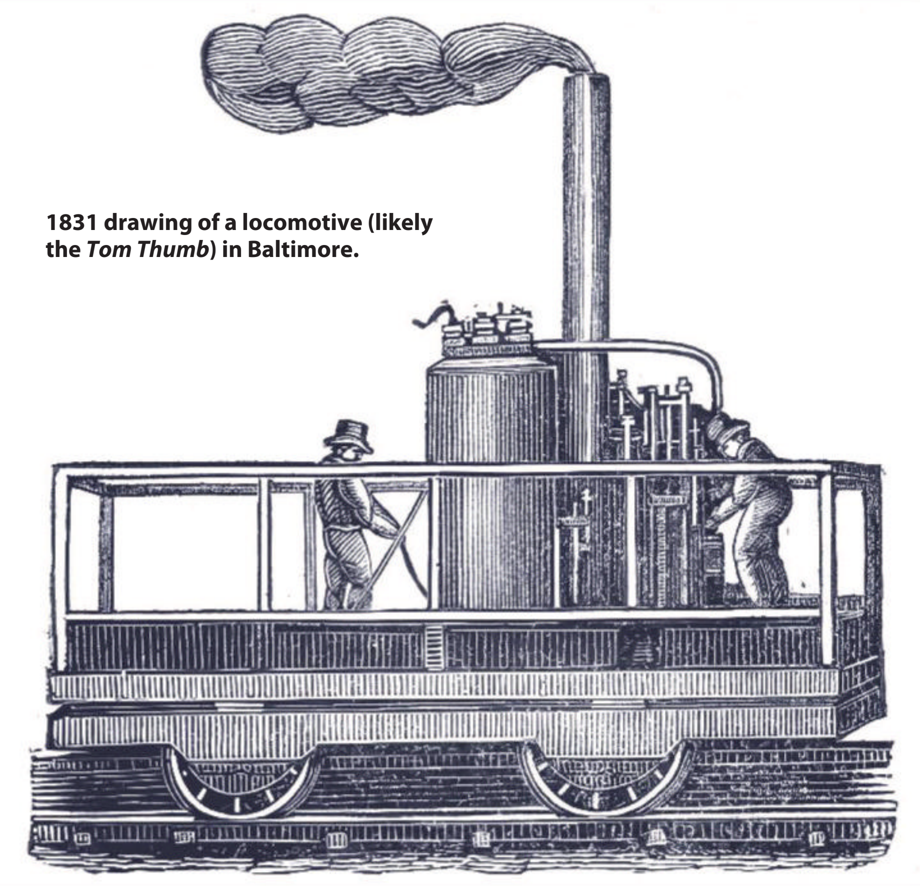
Barrow depot, built in 1874, was the main shed for the servicing and stabling of Furness Railway locomotives. Other smaller depots were situated at Carnforth, Whitehaven and Moor Row. Facilities were available at Coniston and Lakeside for overnight branch line engine stabling.

In 1963, the final shed code for Barrow was 12C as part of British Railways Carlisle Kingmoor District. The depot was closed in 1977 and demolished.

Five of these large and impressive 4-6-4 'Baltic tanks' Nos.115-9 were built for the FR by Kitson of Leeds in 1920 to a design by D. L. Rutherford. Weighing in at 92 tons and at a length of 50ft, the 4-6-4Ts were used mainly on express and mail trains between Barrow and Carnforth. Built to the limits of the loading gauge, they were prohibited from working north to Whitehaven. No.118 heads an up Barrow–Carnforth express near Grange-over-Sands. Withdrawal by the LMS took place between 1934 and 1940.



1830: THE YEAR I AND TRANSPORT



1831 drawing of a locomotive (likely the *Tom Thumb*) in Baltimore.

Three railways, two continents, one year

The first day of the year 1830 was Friday 1st January. When the year opened, the Stockton & Darlington Railway (S&DR) was not quite five years old. While it may not have been the only public railway in operation in the United Kingdom on that day – for example, the Surrey Iron Railway still had sixteen years of operation before its abandonment – it was arguably the most significant operation in existence that day.

As the year opened on New Year's Day, there were around 90 miles (145km) of railways in the United Kingdom. Around a quarter of this length was the S&DR lines. In the United States on that day, while a small number of early private railways existed, by modern standards there were no miles of railways in the young country. By the end of that year, on Friday 31st December 1830 there were just over 125 miles (201km) of railway lines in the UK. Thirty-six of these miles were accounted by the combined distances of the Liverpool & Manchester Railway and Canterbury & Whitstable Railway.

In the United States the Baltimore & Ohio was joined in operation by a number of smaller railroads – Mill Creek & Mine Hill Navigation & Railroad Company, Schuylkill Valley Railroad & Navigation Company, Union Canal Company and the Little Schuylkill Navigation, Railroad and Coal Company – to take the total mileage to around 50 miles.

The turning point for investor expectations in the United Kingdom regarding railways was the LM&R's inauguration. This railway showcased to investors a previously unforeseen and speculative demand: passenger travel. The promising revenue potential from this newfound source sparked significant alterations in business strategies and fuelled the later 'railway mania' of the mid-1830s.

Through centuries of development, while there are many points that can arguably be pointed to as tipping or turning points, the three openings that occurred in the year 1830 have to be the most significant. The modern railway revolution may have been ignited with the launch of the S&DR in the North East in 1825 but the year saw the industry take off. On both sides of the Atlantic three historic railway companies commenced services in the first year of the decade. In Britain, the Liverpool & Manchester Railway (L&MR) in the north west and the Canterbury & Whitstable Railway (C&WR) near London built on the development and operation of the S&DR. In the United States the Baltimore & Ohio Rail Road (B&O) had commenced services in the first week of the year. It was in fact the first of the three railway operations to launch in the year. Its promoters and backers had studied the creation and planning of the S&DR in England and learned many valuable lessons they brought to their railroad.

The reason for dubbing 1830 as a 'ground zero for the railway revolution' was that all three railways had fulfilled many of the economic and business reasons for founding a railway as the technology now matched up to the demands of promoters.

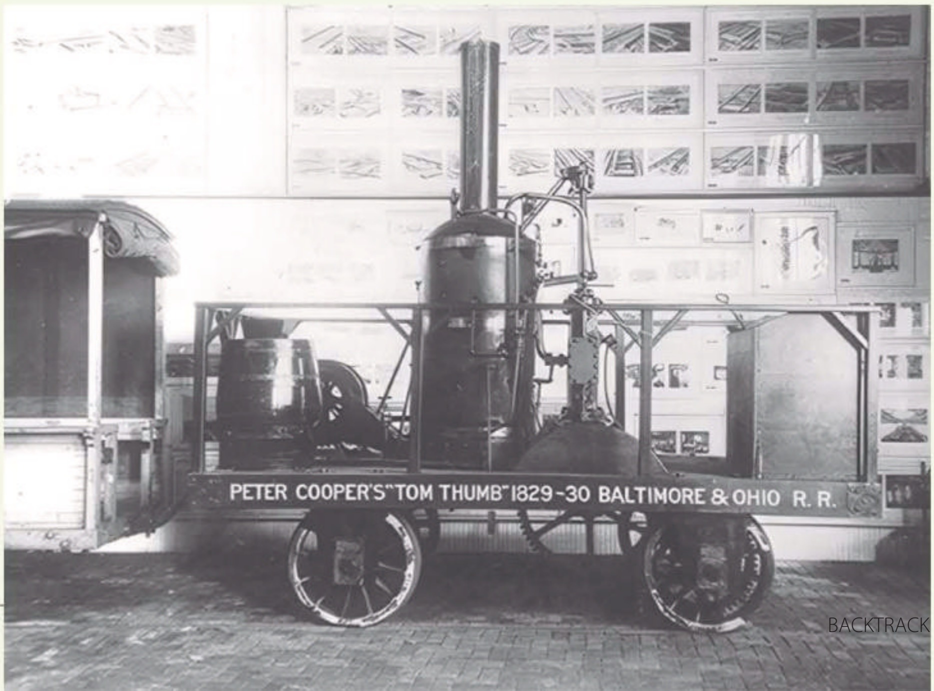
The previous decade in the United States and the United Kingdom had been economically difficult. The USA was transitioning from an agricultural economy to an industrial one, with economic instability following the Panic of 1819 and debates over tariffs and banking policies. The UK was still suffering from the after-effects of the Napoleonic Wars which had ended in 1815. Britain faced economic depression, high unemployment and social unrest.

The Corn Laws of 1815 were keeping grain prices high, benefiting landowners but causing hardship for urban workers. Widespread poverty and harsh factory conditions led to protests and demands for reform, culminating in movements like early trade unions and the push for electoral reform. Britain had returned to the gold standard in 1821, stabilising currency but also limiting credit expansion.

All three railways were the result of the burgeoning financial markets and shareholding capital that had been growing since the start of the nineteenth century. They had come through the financial market 'mania' of the mid-1820s since the launch of the S&DR. Many of the post-1825 railways promoted during the 'mania' of the mid-1820s were fleeting wonders that vanished, only to be realised years later, mostly in somewhat different forms.

The three key railways in the evolution of the industry had seen out the UK railway 'mania' of the 1830s when they launched. The initial Act of Parliament for the construction of the C&WR was passed on 10th June 1825, some three months before the first train on the

The *Tom Thumb* replica in action.



RAILWAYS TRANSFORMED ECONOMY, INDUSTRY FOREVER

BY JAMES GRAHAM

S&DR. The L&MR had been authorised by Parliament in 1826 and opened in September 1830. Chapter 123 of the 1826 Session Laws of Maryland, passed 28th February 1827, and the Commonwealth of Virginia on 8th March 1827, chartered the Baltimore and Ohio Rail Road Company, with the task of building a railroad from the port of Baltimore west to a suitable point on the Ohio River.

They were all public railways, open to all, and relied on flangeless rails that are similar to those in use today. They were short by modern standards – about 30 miles for the Liverpool & Manchester), some six miles for the Canterbury & Whitstable Railway while on opening the Baltimore and Ohio was 26 miles in length. For the era, however, these were substantial and significant infrastructure projects which were pushing the envelope of civil and mechanical engineering and all involved large investments of capital.

All three railways were essentially plotted as a means of bypassing congested, slow and costly alternatives such as canals and unpaved and muddy arterial roads. Manchester merchants wanted a means of getting imported raw materials and despatching finished goods for export from Liverpool docks. In Kent, up until the early 1800s, Canterbury relied on the River Stour as its primary route for goods. This led to Pegwell Bay near Ramsgate on Kent's eastern coast. Despite being a mere seventeen miles in a straight line, the winding river route stretched out to roughly 70 miles.

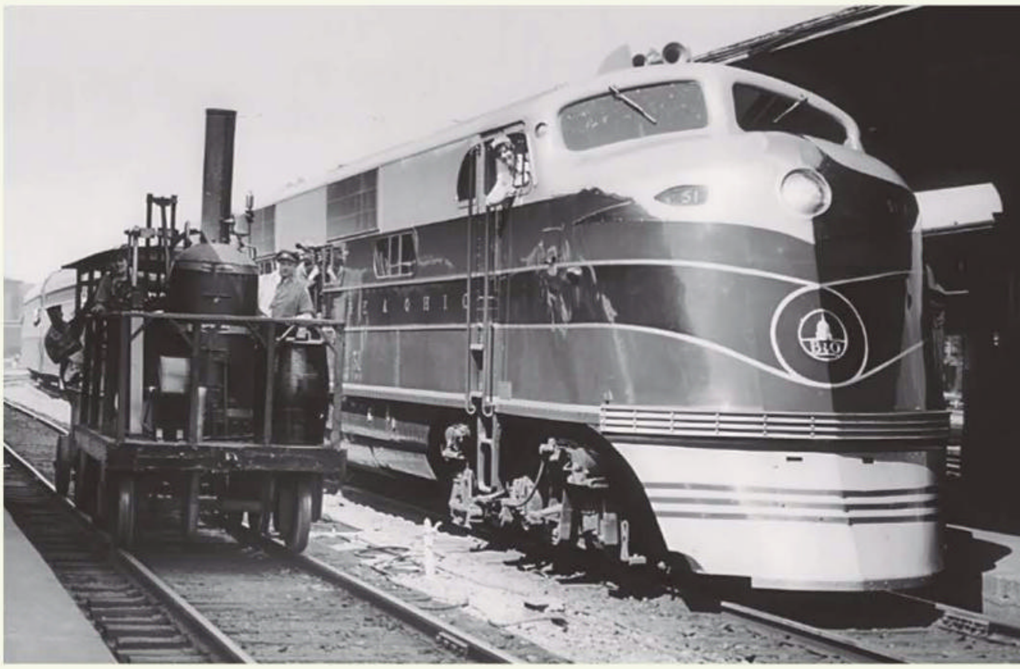
B&O: 1830 begins with railway milestone

The year was just a week old when the first milestone of 1830 was reached. So it was on a cold and snowy Thursday 7th January when the Baltimore and Ohio Rail Road (B&O) opened its first section, just 1½ miles in Baltimore, Maryland. A one-way ticket cost nine cents. From this small acorn, a mighty network would grow. One hundred and thirty years later, at the end of 1970, the B&O operated 5,552 miles (8,900 km) of road and 10,449 miles of track, not including the Staten Island Rapid Transit (SIRT) or the Reading Railroad and its subsidiaries.

The B&O was chartered in 1827 to build a steam railroad west from Baltimore, Maryland, to a point on the Ohio River and began scheduled freight service over its first section on 24th 1830.

The first railroad to carry passengers, and, by accident, the first tourist railroad, beginning operating in 1827, was the Lehigh Coal & Navigation Company, initially a gravity road feeding anthracite coal downhill to the Lehigh Canal, using mule power to return nine miles up the mountain; however, by the summer of 1829, as newspapers documented, it regularly carried passengers. In 1843, renamed the Summit Hill & Mauch Chunk Railroad, it added a steam-powered cable return track for true two-way operation and ran as a common carrier and tourist road from the 1890s to 1937. Lasting 111 years, the SH&MC is described by some to be the world's first roller coaster.

***Tom Thumb* replica alongside B&O EMC EA/EB No.51, 1937. Both are on display at the B&O Railroad Museum in Baltimore.**



The B&O became noted for its pioneering innovations in railroading. It was the first US railroad to operate a steam locomotive, it built historic infrastructure and it operated prestigious passenger trains. It gained additional fame by lending its name as one of the four railroads in the original US version of the popular board game 'Monopoly'.

The impetus for the construction and operation of the B&O was kicked off on 12th February 1827 as leading citizens of Baltimore met at the home of Irish-born financier George Brown to discuss railroads and canals. Such was the speed of progress in planning and organising the railroad that on 4th July 1828 the first stone was laid. Charles Carroll, a signer of the Declaration of Independence, was first to break ground. Carroll's last public act was the laying of the 'first stone' of the railroad at almost 91 years of age. The Carrollton March, written in his honour to celebrate the occasion, is recognised as the first train song.

The railroad is generally accepted as a pioneering railroad line, not simply because of the date of commencement of services. Along the way, it marked numerous milestones, including the introduction of the first railroad timetable in 1830 as well as the first passenger and freight station in America at Mount Clare, also known as Mount Clare Depot, Maryland.

Another notable first before it opened to the public saw the trial running of the first locomotive built in America, *Tom Thumb.* The tracks were laid using 'standard English gauge' of 4ft 8½in (1,435mm). The year the railroad opened it became the first railroad to be authorised to go into the nation's capital of Washington, DC.

In 1828 Ross Winans had developed a friction wheel with outside bearings which established a distinctive pattern for railroad wheels for the next 100 years or so. In the late 1820s he became associated with the B&O, eventually entering its service as an engineer. One of his first and more important tasks was to help the inventor and industrialist Peter Cooper of New York City build the revolutionary *Tom Thumb* steam locomotive, to eventually replace the horse-drawn rail cars then being pulled along the short route of the Baltimore and Ohio which had been built so far – from the city's waterfront temporary depot facing The Basin, today's Inner Harbor, at East Pratt Street and South Charles Streets to the south west some twenty or so miles to its first terminus at Ellicott Mills on the upper Western Branch of the Patapsco River.

Canterbury & Whitstable Railway: the 'Crab & Winkle' is born

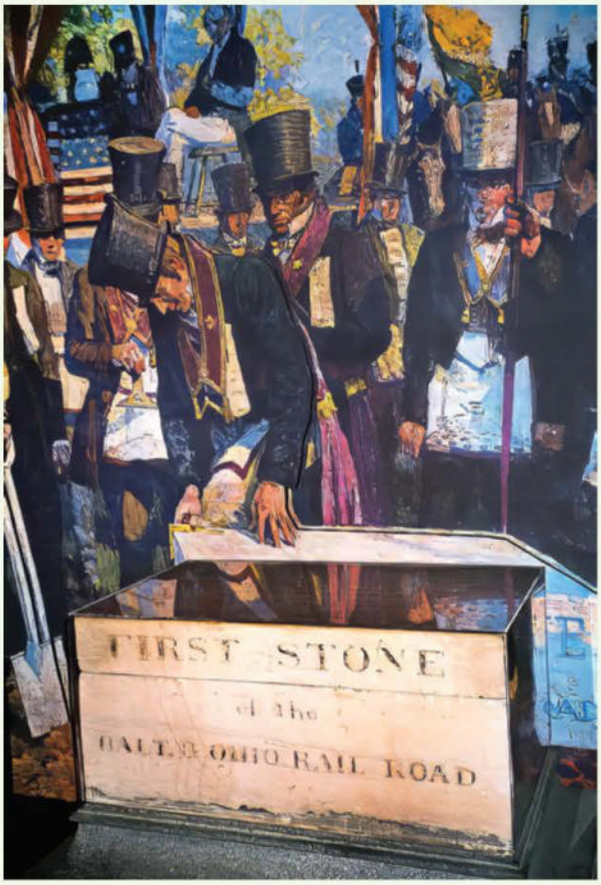
The ceremonial opening of the Canterbury & Whitstable Railway (CWR) in England in May 1830 saw a small six-mile line that was much feted in the area, introduced two vital firsts to the industry in a lifetime which lasted only sixteen years and gained the fond local nickname of the 'Crab and Winkle'.

While the railway introduced the first steam railway locomotive to the south of England, this was used only on the level stretches of the line. The inclines were worked by steam-powered winches which pulled up and let down the carriages and goods wagons. The line was constructed to Stephenson's gauge, now known as standard gauge. The initial steam locomotive, 0-4-0 *Invicta,* was used on a level section of the route. It was joined later by larger Stephenson 0-6-0s.

The local newspaper, the *Kent Herald* newspaper, recorded the event and atmosphere of the day. This is an abridged version of the report.

"Canterbury and Whitstable Railway

"On Monday May 3, 1830, according to announcement, the opening of the above Railway took place. The day being remarkably fine, the whole City seemed to have poured forth its population and company from the surrounding country continuing to augment



Cornerstone of the B&O, laid 4th July 1828, by Charles Carroll of Carrollton, now displayed at the B&O Railroad Museum.

the throng, by eleven o'clock, the time appointed for the procession to start, the assemblage of spectators was immense. The fields on each side of the Line of road being crowded by well-dressed people of all ages, presented one of the most lively scenes we have witnessed for some time. The arrangements were so judiciously made that by a quarter past eleven the procession was set in motion, the Signal for starting having been given by Telegraph. The bells of the Cathedral rang merrily and guns were fired from Westgate Tower at intervals during the day. Flags were displayed on the public buildings and Railway with various inscriptions, such as 'Prosperity to the City,' &c.

The following is the order:

1. Carriage with the Directors of the Railway Company, wearing white rosettes and the Engineers wearing crimson rosettes
2. A coach with the Aldermen and other Members of the Canterbury Corporation.
3. A carriage with ladies.
4. A carriage with a band of music.
5. A carriage with ladies.
6. 20 were carriages containing the Proprietors of the Railway, their freinds, &c, in all amounting to upwards of three hundred. A Convoy man, with a crimson ribbon around his hat, upon which 'Railway' was printed, was placed behind each Carriage. The procession on starting was loudly cheered by the assembled multitude and was drawn forward in two divisions until it arrived at the first Engine Station, in which manner also it entered Whitstable, preceded by the locomotive Engine. The various Carriages contained upwards of 300 persons, consisting of the principal gentry, citizens, and inhabitants of Canterbury and its neighbourhood.

"At Whitstable, an excellent lunch was provided for the Company by the Directors of the Cumberland Arms. On returning the procession was joined at the Engine Station and the whole went forward into Canterbury together.

"The motion of the Carriages is particularly easy and agreeable and at first starting, the quiet power with which the vast mass was set in motion dispelled every fear in the passengers. The entrance into the Tunnel was very impressive – the total darkness – the accelerated speed – the rumbling of the ears – the loud cheering of the whole party echoing through the vault combined to form a situation almost terrific – certainly novel and striking. Perfect confidence in the safety of the whole apparatus however seemed to prevail and the company emerged from the dismal tunnel into the warm precincts of the cheerful day in high spirits. The passage through the woods was very pleasing and the views at different points are picturesque in the extreme. The whole procession after mustering at the at the Engine Station glided rapidly and majestically into Canterbury at about 6 o'clock, greeted by, if possible, a more numerous assemblage of spectators than hailed its outset. The journey altogether was a delightful one – not the slightest accident occurred.

"The present line of railway was laid out by George Stephenson Esq., Civil Engineer, in 1826 and has been constructed on the plans and under the Superintendence of himself and son, Mr. Robert Stephenson. It is six miles in length and two miles from Canterbury rises one foot in 46 till it reaches the summit of Tyler Hill. It is then nearly level for the next mile to Clow's Wood, rising only 1 foot in 750 feet, in the following mile there is a descent of 1 foot in 31, then a level for nearly another mile and a quarter and again a descent of 1 foot in 53, extending about half a mile the remaining quarter mile being level.

"About 6 o'clock a large party, consisting of the Directors and gentry of the City and neighbourhood sat down to an excellent dinner provided by Mr. Field at the King's Head Hotel; W. H. Balcok Esq. in the chair.

"After the loyal toasts, the healths of several gentlemen were proposed, including M. R. Stephenson. He acknowledged the toast but spoke so low we could not hear distinctly what he said; however he declared the Engine fully answered his expectations.

"Mr. Joshua Richardson, the resident Engineer, congratulated the City on the advantages to be derived by the increased facility for conveyance for merchandise and passengers from the sea to Canterbury, which will in effect make Canterbury a sea port.

"These facilities would also have a direct tendency to increase the commerce and add to the wealth and importance of the inhabitants."

Invicta steams in inaugural run

On 3rd May 1830 a clanking passenger locomotive named *Invicta* arrived at the platform near Whitstable Harbour, carrying nearly 300 excited passengers from Canterbury for the line's inauguration.

The engineering mix of both locomotive and line was attributed to George Stephenson and his son Robert, with the motive power crafted at their workshops in Newcastle upon Tyne, at the other end of the country from Kent.

The design of *Invicta* drew inspiration from Stephenson's famed *Rocket*, which would enter service four months later on the Liverpool to Manchester line that year. However, with just 12 horsepower, *Invicta* struggled with gradients and was confined to the section of the line between Bogshole and South Street. The remainder of the route relied on cables pulled by steam-driven static winding engines located at the Winding Pond in Clowes Wood and the Halt on Tyler Hill Road. Additionally, the Winding Pond served as a water source for the engines.

It was the twentieth locomotive built by railway engineers the Stephensons, being constructed immediately after *Rocket*. *Invicta* marked the end of the first phase of locomotive design, which had started with Richard Trevithick's Coalbrookdale locomotive of 1802.

The original fire-tube boiler had 25 tubes of 3in diameter. It had a total heating surface of 196 square feet – 157 square feet from the tubes and 39 square feet from the rectangular firebox. The boiler had a working steam pressure of 40 pounds per square inch. The four-coupled wheels were 4ft in diameter, while the boiler was 8ft long and 3¼ft in diameter. The construction of *Invicta* cost £635.

The locomotive weighed 6tons 5cwt excluding the tender and produced 4 horsepower (3.0 kW). Contemporary illustrations show that *Invicta* was originally equipped with a single-axle tender, which has not survived. The major controls, including the regulator, are located about halfway along the boiler's left-hand side. It was operated by a driver, who stood on a timber footboard mounted above the locomotive's rear wheel (as on *Locomotion* No.1) and a fireman who stood in the tender.

In 1830 journey times averaged around 40 minutes. Upon completion in April that year *Invicta* was shipped by sea from Newcastle to Whitstable. For the maiden journey, the locomotive was driven by Edward Fletcher, who later became the locomotive superintendent of the North Eastern Railway. *Invicta* was the sole locomotive to be used on the line at the time of its opening.

Liverpool & Manchester: Wellington gives railways the boot

The Duke of Wellington is said to have considered it would be a mistake to build railroads because they would "only encourage the common people to move about needlessly". Despite the war hero's assertions, it is almost as if the two noteworthy railways projects that launched before the Liverpool & Manchester Railway that year were rehearsals for the real thing which would come along at the end of the year.

The idea for a project of a railway between Liverpool and Manchester had first been entertained in 1822. The L&MR was the first inter-city railway in the world. It opened on 15th September 1830 between the Lancashire towns of Liverpool and Manchester in England. It was also the first railway to rely exclusively on locomotives driven by steam power, with no horse-drawn traffic permitted at any time; the first to be entirely double track throughout its length; the first to have a true signalling system; the first to be fully timetabled and the first to carry mail.

Trains were hauled by company steam locomotives between the two towns, though private wagons and carriages were allowed. Cable haulage of freight trains was down the steeply-graded 1.26-mile Wapping Tunnel to Liverpool Docks from Edge Hill Junction. The railway was primarily built to provide faster transport of raw materials, finished goods, and passengers between the Port of Liverpool and the cotton mills and factories of Manchester and surrounding towns.

No account of the day can fail to record the tragedy when Member of Parliament William Huskisson was fatally struck by Stephenson's *Rocket*. As he approached the train to speak to the Duke of Wellington, he misjudged the speed, fell on to the tracks and suffered fatal injuries.

The prospectus

This success was forecast by the railway's optimistic initial prospectus. "THE COMMITTEE of the LIVERPOOL and MANCHESTER RAIL ROAD COMPANY think it right to state, concisely, the ground upon which they rest the claims to public encouragement and support." Some excerpts from the original prospectus of October 1824 include:

"The importance, to a commercial state, of a safe and cheap mode of transit, for merchandise, from one part of the country to another, will be readily acknowledged. This was the plan, upon the first introduction of Canals: it was for the public advantage; and although the new mode of conveyance interfered with existing and inferior modes; and was opposed to the feelings and prejudices of Landholders, the great principle of THE PUBLIC soon prevailed, and experience has justified the decision.

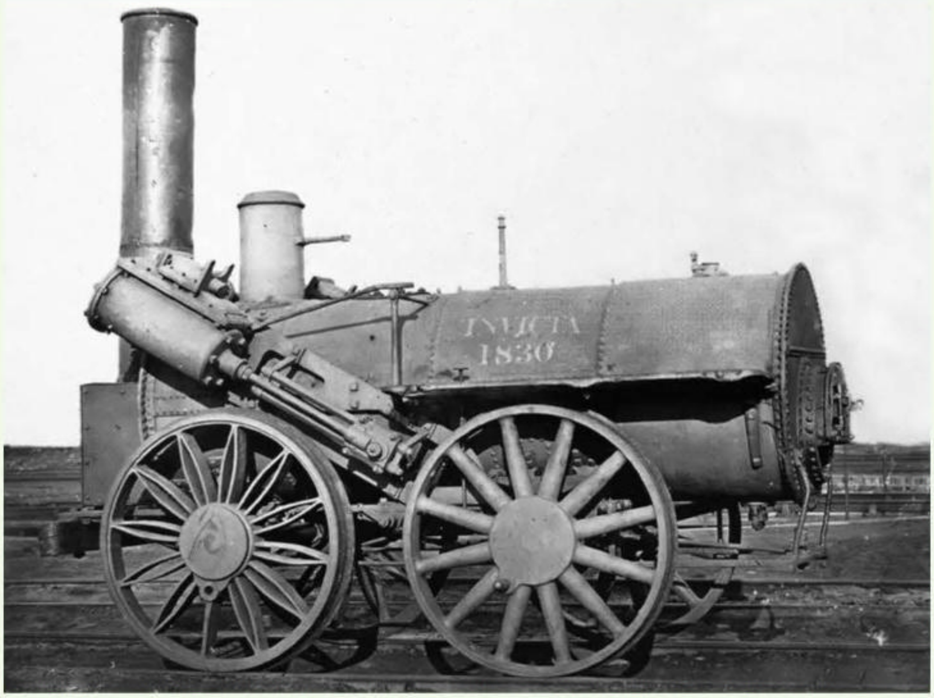
"It is upon the same principal that Rail Roads are now proposed to be established; as a means of conveyance manifestly superior to existing modes: possessing, moreover, this recommendations in addition what could have been claimed in favour of Canals, namely, that the Rail Road scheme holds out to the public not only a cheaper, but far more expeditious conveyance than any yet established.

"The Liverpool and Manchester Rail Road is proposed to commence near the Prince's Dock, Liverpool, thence to Vauxhall Road, then through Bootle, Walton, Fazakerley, Croxteth, Kirby, Knowsley, Eccleston, Windle, Sutton, Haydock, Newton in Makerfield, Golborn, Lowton, Leigh, Pennington, Astley, Irlam, Worsley, Eccles, Pendlebury, Salford, Hulme, to the neighbourhood of the westerly end of Water-street, Manchester: in the whole, a distance of about thirty-three miles. By a reference to the Plan it will be perceived that the Road does not approach within about a mile and a half of the residence of the Earl of Sefton, and that it traverses the Earl of Derby's property over the barren mosses of Kirby and Knowsley, passing about two miles distance from the Hall.

"The ground has been surveyed by eminent Engineers, and the estimated expense of a Rail Road, upon the most improved construction, including the charge for loco-motive engines, to be employed on the line, and other contingencies, is £400,000, which it is proposed to raise in 4,000 shares of £100 each.

"The total quantity of merchandise passing between Liverpool and Manchester, is estimated, by the lowest expectation, at One Thousand Tons per day. The bulk of this merchandise is transported either by the Duke of Bridgewater's Canal, or the 'Mersey and Irwell Navigation'. By both of these conveyances goods must pass up the river Mersey, a distance of 16 or 18 miles, subject to serious delays from contrary winds, and not infrequently, to actual loss or damage from tempestuous weather. The average length of passage, by these conveyances, including the customary detention on the wharfs, may be taken at 36 hours, longer or shorter, according to the favourable or unfavourable, state of the winds and tides. The average charge upon merchandise, for the last fourteen years, has been about 15s a ton.

Canterbury & Whitstable Railway *Invicta,* minus its tender.



"By the projected Rail Road, the transit of merchandise between Liverpool and Manchester will be effected in four or five hours, and the charge to the merchant will be reduced at least one-third. Here then will be accomplished an immense pecuniary saving to the public, over and above what is perhaps still more important, the economy of time. Nor must we estimate the value of this saving merely by its nominal amount, whether in money or time: it will afford a stimulus to the productive industry of the country, it will give a new impulse to the powers of accumulation, the value and importance of which can be fully understood, only by those who are aware how seriously commerce may be impeded by petty restrictions, and how commercial enterprise is encouraged and promoted by an adherence to principles of fair competition, and free trade.

"In the United States of America also, they are fully alive to the important results to be anticipated from the introduction of Rail Roads; a gentleman from the United States having recently arrived in Liverpool, with whom it is a principal object to collect the necessary information in order to the establishment of a Railway, to connect the great rivers Potomac and Ohio."

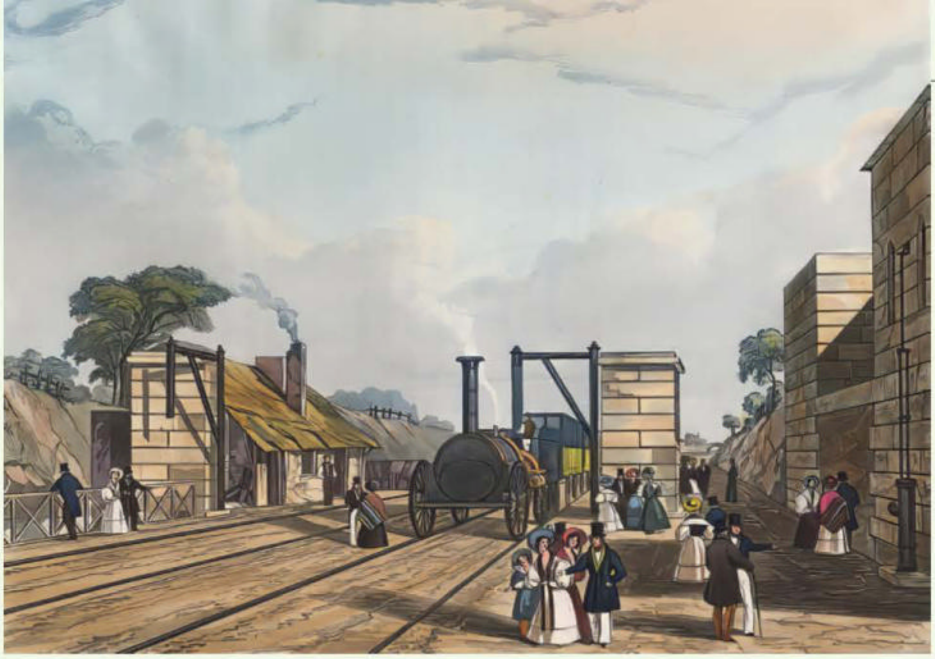
Rockets will go off in 2030

In the United States, barely 54 years old as a country in 1830, the inception of the B&O aimed to cater to Baltimore merchants seeking to engage with settlers traversing the Appalachian Mountains. This positioned a railroad amidst competition from various established and planned turnpikes and canals such as the Erie, Chesapeake and Ohio Canal, it sought to provide an alternative and efficient mode of transport.

The significance of these lines for railway development can be traced to this day. Following the example of the Stockton & Darlington Railway, the organisers of the other two lines looked to involve passenger traffic. Previously railways had been considered as means of moving coal and finished goods as a way of improving manufacturers' reach and increasing sales.

To this day, many railway professionals still refer to passengers as 'self-loading cargo'. The promoters of the S&DR did not in their early estimates calculate on any revenue worth speaking of from this source. Travelling was in those days an expensive and time-heavy luxury, which only those well-to-do could afford to indulge in. It is not surprising that passenger traffic was an afterthought. Most labourers worked within walking distance of the new factories and had little apparent need or desire to travel, while the middle and upper classes kept horses and carriages for travels.

People were less migratory in their habits compared with the first quarter of the 21st century, and in many a community the oldest inhabitant had lived and died without having travelled beyond a circumference of 50 miles from the place of his birth except for those who emigrated in search of work. It was thought there was scarcely passenger traffic enough to afford a reasonably profitable return to the owner of the only coach that ran three or four times a week on the regular turnpike road.



A hand-coloured aquatint plate from drawing, made on the spot after T. Bury, plates watermarked J. Whatman, 1831.

In terms of the United States, while the Eastern seaboard had had centuries of settlement from Europeans meaning that the stereotype of those who might not move more than fifty miles from his birthplace was unlikely, more pertinent was the growing demand for transport from those who had travelled thousands of miles to the New World and intended to continue westwards for a new and better life.

There was little to encourage the hope that the advent of the rail and locomotive, without the promise of greater speed, would tend to induce greater facilities of travel, or a greater disposition to indulge in peripatetic habits.

Cotton bales, manufactured goods, cattle, coal and iron stood as the primary sources of revenue for the L&MR. Without the advent of the locomotive engine and its significant advancements, which now whisk us from one place to another with almost magical speed, it's likely that railways would have largely failed. Interestingly, despite the rise of railways, canals have not seen significant interference in the transport of goods. The construction cost of railways far exceeds that of canals, making land transport less competitive when speed is not crucial. However, for passengers, speed is paramount. The ease and swiftness of travel generate a demand for passengers at a rate that has likely not been fully grasped yet.

In essence, the Liverpool and Manchester project showcases a notable readiness to embrace not only risk but also uncertainty. Driven by a pressing need felt keenly within the merchant and industrial circles, they embraced a promising yet untested technology to address it. They sought top-notch technical counsel, explored alternative routes and adjusted their business strategies to capitalise on the unforeseen demand that emerged. Their efforts bore fruit handsomely, as the railway proved both a technical triumph and a financial boon right from the start. While some decisions may be subject to criticism, it is undeniable that promoters and investors acted with clear-eyed realism, free from false illusions.

For those who developed a taste for railway or railroad bicentenaries, 2030 is going to be a *smorgasbord* of historical happenings. The bicentenaries of the Canterbury & Whitstable and the Liverpool & Manchester will be marked at different ends of this country while the rockets will no doubt go off across the Atlantic.

Other railways launched in 1830

Given the head of steam that had started building up in 1825 and had seen numerous railway projects start or open for business, there is no surprise that other railway operations started in 1830 though none had the significance of the big three.

Across the Channel, the first portion of the Saint-Étienne–Lyon railway opened between Givors and Rive-de-Gier, France on 1st July 1830. The line was built between 1828 and 1833 by Camille Seguin and Marc Seguin at a cost of 14,500,000 francs.

Construction had begun in September 1826. Marc Seguin was chief engineer, chief of estates, maintenance and rolling stock at the same time. Despite all the natural obstacles he encountered, Seguin drew up the plans for the line, 34.7 mile (56 km) in length, with a slow descent towards Lyon. The first part of the line, between Saint-Étienne and Rive-de-Gier was laid at a constant descent of 1.2 to 1.4%. The following section, running along the Gier valley down to Givors, on the Rhône, was less inclined, with a slope of 0.65%. The last section of the line, to Lyon, was built virtually level.

The Wigan Branch Railway was a short-lived early British railway company, formed in 1830 and operating from 1832 to 1834 in Lancashire. The 6-mile 47 chains line ran from the Liverpool and Manchester Railway (L&MR) near Parkside to Wigan. The Act included a 2 miles 54 chains branch, the Springs branch, with connections to collieries in the district.

The last of the railroads launched that year saw the South Carolina Canal and Rail Road begin operations in the United States. As the bells were ringing on Christmas Day that year, the railroad in South Carolina opened for business. It operated independently from 1830 to 1844. One of the first railroads in North America to be chartered and constructed, it provided the first steam-powered, scheduled passenger train service in the United States.

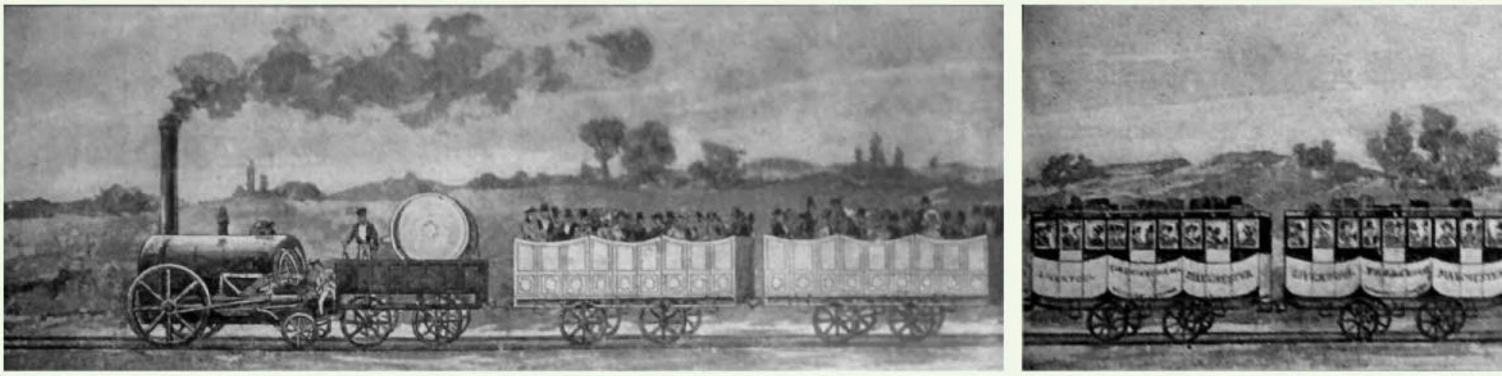
Chartered under act of the South Carolina General Assembly of 19th December 1827, the company operated its first 6-mile line west from Charleston, South Carolina, in 1830. The railroad ran scheduled steam service over its 136-mile line from Charleston, South Carolina, to Hamburg, South Carolina, beginning in 1833.

The future was rail

The openings of the three railways, as well as the Stockton & Darlington Railway almost five years before, were the start of the modern railway or railroad industry as we know it today. Excitement at the events and the future for transport they promised mixed with equal measures of fear and worry about the economic and social effects of the invention.

As each of the three railways strode out to become commercial successes in the first years of the 1830s, as well as those others who commenced in 1830, they were learning as they went on. Managers were encountering problems no-one in mass transport had seen before. Naysayers continued to point to the decimation of the canal businesses, turnpike owners were lamenting the demise of coaching traffic, while those who looked after the original horsepower, such as blacksmiths and farriers, saw business disappear as fast as an approaching steam locomotive.

One UK publication, *The Penny Magazine,* took a look at the Liverpool & Manchester in 1833, running to a special supplement for its readers on the three-year-old enterprise. The eight-page pamphlet goes into great detail on



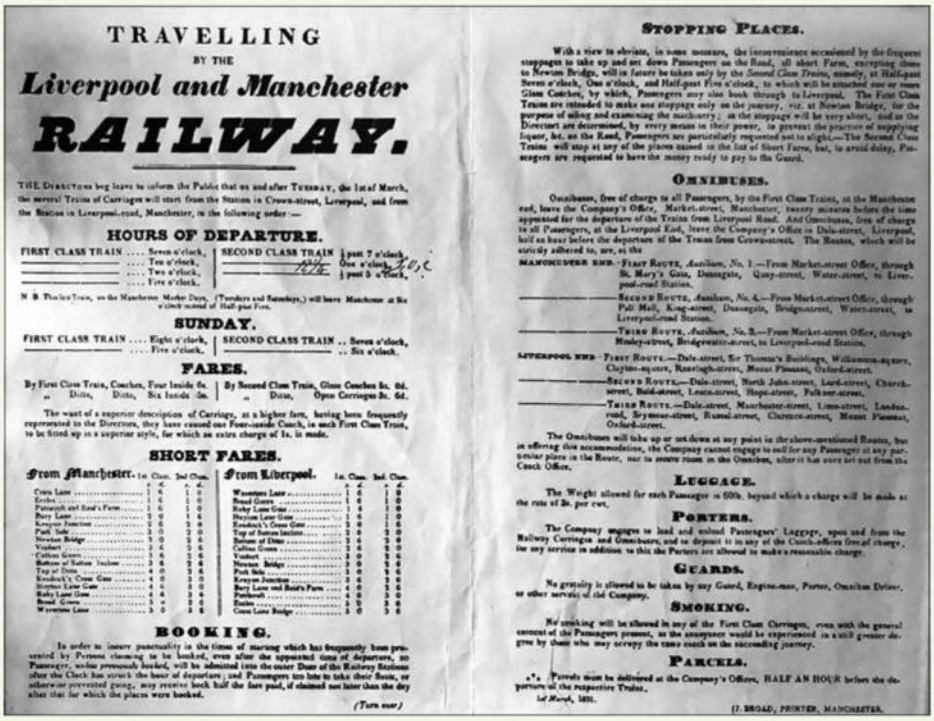
The first passenger trains on the L&MR which kick-started a rail revolution in 1830.

the line, its development, infrastructure, freight and passenger services as well as looking deeply into the business affairs of the company. While it only covers the north western railway company, it excitement can be carried over to the other lines and stand for those in the wider community.

The following excerpts convey to the modern reader over a distance of some 192 years the newness of both the railway and “the benefits of cheap and quick communication to a great commercial state”. Britain was finding its way in the first years of the Industrial Revolution, arguably given a booster shot by the invention of the railway.

Canals and river transport had taken the first step stirrings of the domestic development of the Industrial Revolution. However, the slow rate of canal boats was made slower by the tedious need to rise and lower their passage at the time-consuming locks. This slowness was exacerbated by the meandering nature of many canals as they hugged contour lines on their routes.

For the writers of the supplement, the future was bright, the future was rail.



TRAVELLING
BY THE
Liverpool and Manchester
RAILWAY.

THE DIRECTORS beg leave to inform the Public that on and after TUESDAY, the 1st of March, the several Trains of Carriages will start from the Station in Crown-street, Liverpool, and from the Station in Liverpool-road, Manchester, in the following order:—

HOURS OF DEPARTURE.

FIRST CLASS TRAIN .... Seven o'clock,
.... Ten o'clock,
.... Two o'clock,
.... Five o'clock.

SECOND CLASS TRAIN ½ past 7 o'clock,
One o'clock,
½ past 5 o'clock,

N.B. The last Train, on the Manchester Market Days, (Tuesdays and Saturdays,) will leave Manchester at Six o'clock instead of Half-past Five.

SUNDAY.

FIRST CLASS TRAIN .... Eight o'clock,
.... Five o'clock.

SECOND CLASS TRAIN .. Seven o'clock,
.. Six o'clock.

FARES.

By First Class Train, Coaches, Four Inside 6s.
" Ditto, Ditto, Six Inside 5s.

By Second Class Train, Glass Coaches 5s. 6d.
" Ditto, Open Carriages 3s. 6d.

The want of a superior description of Carriage, at a higher fare, having been frequently represented to the Directors, they have caused one Four-inside Coach, in each First Class Train, to be fitted up in a superior style, for which an extra charge of 1s. is made.

SHORT FARES.

From Manchester. 1st Class. 2nd Class.

From Liverpool. 1st Class. 2nd Class.

BOOKING.

In order to insure punctuality in the times of starting which has frequently been prevented by Persons claiming to be booked, even after the appointed time of departure, no Passenger, unless previously booked, will be admitted into the outer Door of the Railway Stations after the Clock has struck the hour of departure; and Passengers too late to take their Seats, or otherwise prevented going, may receive back half the fare paid, if claimed not later than the day after that for which the places were booked.

(Turn over)

STOPPING PLACES.

With a view to obviate, in some measure, the inconvenience occasioned by the frequent stoppages to take up and set down Passengers on the Road, all short Fares, excepting those to Newton Bridge, will in future be taken only by the *Second Class Trains*, namely, at Half-past Seven o'clock, One o'clock, and Half-past Five o'clock, to which will be attached one or more Glass Coaches, by which, Passengers may also book through to Liverpool. The First Class Trains are intended to make one stoppage only on the journey, viz. at Newton Bridge, for the purpose of oiling and examining the machinery; as the stoppage will be very short, and as the Directors are determined, by every means in their power, to prevent the practice of supplying liquor, &c. on the Road, Passengers are particularly requested not to alight.—The Second Class Trains will stop at any of the places named in the list of Short Fares, but, to avoid delay, Passengers are requested to have the money ready to pay to the Guard.

OMNIBUSES.

Omnibuses, free of charge to all Passengers, by the First Class Trains, at the Manchester end, leave the Company's Office, Market-street, Manchester, twenty minutes before the time appointed for the departure of the Trains from Liverpool Road. And Omnibuses, free of charge to all Passengers, at the Liverpool End, leave the Company's Office in Dale-street, Liverpool, half an hour before the departure of the Trains from Crown-street. The Routes, which will be strictly adhered to, are, at the

MANCHESTER END.—FIRST ROUTE, *Auxilium, No.* 1.—From Market-street Office, through St. Mary's Gate, Deansgate, Quay-street, Water-street, to Liverpool-road Station.

——SECOND ROUTE, *Auxilium, No.* 4.—From Market-street Office, through Pall Mall, King-street, Deansgate, Bridge-street, Water-street, to Liverpool-road Station.

——THIRD ROUTE, *Auxilium, No.* 3.—From Market-street Office, through Mosley-street, Bridgewater-street, to Liverpool-road Station.

LIVERPOOL END.—FIRST ROUTE.—Dale-street, Sir Thomas's Buildings, Williamson-square, Clayton-square, Ranelagh-street, Mount Pleasant, Oxford-street.

——SECOND ROUTE.—Dale-street, North John-street, Lord-street, Church-street, Bold-street, Leece-street, Hope-street, Falkner-street.

——THIRD ROUTE.—Dale-street, Manchester-street, Lime-street, London-road, Seymour-street, Russel-street, Clarence-street, Mount Pleasant, Oxford-street.

The Omnibuses will take up or set down at any point in the above-mentioned Routes, but in offering this accommodation, the Company cannot engage to *call for any Passenger* at any particular place in the Route, nor to secure room in the Omnibus, after it has once set out from the Coach Office.

LUGGAGE.

The Weight allowed for each Passenger is 60lb. beyond which a charge will be made at the rate of 2s. per cwt.

PORTERS.

The Company engages to load and unload Passengers' Luggage, upon and from the Railway Carriages and Omnibuses, and to deposit it in any of the Coach-offices free of charge; for any service in addition to this the Porters are allowed to make a reasonable charge.

GUARDS.

No gratuity is allowed to be taken by any Guard, Engine-man, Porter, Omnibus Driver, or other servant of the Company.

SMOKING.

No smoking will be allowed in any of the First Class Carriages, even with the general consent of the Passengers present, as the annoyance would be experienced in a still greater degree by those who may occupy the same coach on the succeeding journey.

PARCELS.

. Parcels must be delivered at the Company's Offices, HALF AN HOUR before the departure of the respective Trains.

1st March, 1831.

(J. BROAD, PRINTER, MANCHESTER.

An 1831 flyer with the timetable and conditions of carriage of the L&MR, printed by Jesse Broad, printers of Manchester.

“Monthly Supplement of THE PENNY MAGAZINE Of The Society For The Diffusion Of Useful Knowledge

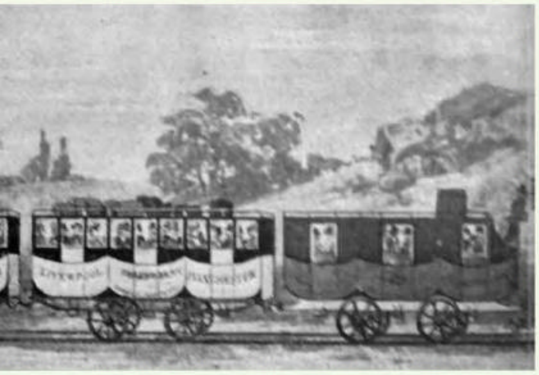
MARCH 31-APRIL 30, 1833

“The increased rapidity of travelling is one of the most remarkable features of the present age. Remote places are, by this means, virtually brought near to each other; and thus, while intelligence is diffused, an impulse is given to commerce, each of which advantages most powerfully affects the condition of the people. The benefits of cheap and quick communication to a great commercial state are too evident to require to be enlarged upon. Time and money are thus most important saved: and the rapid and economical transit of goods, by lessening their cost, enables the humblest to partake of comforts which were formerly considered as luxuries only for the rich.

“Of all the local improvements made with this object, in modern times, the Manchester and Liverpool Railway is the most remarkable. Its completion forms an epoch in the history and application of mechanical power. If only ten years back it had been said, that persons could pass, without inconvenience and without danger, over a distance of thirty-one miles in one hour, the tale would have been treated as one of those visionary stories which in former days were the amusements of the nursery.

“The advantage of rail-roads over common roads consists the great diminution of friction which they occasion, whereby given weights may be drawn through equal distance at a much less expense of power. Many experiments have been made in order to ascertain the economy of power which they produce. The most moderate calculations estimate the resistance on a level turn-pike-road to be more than seven times as great as that on a level rail-road; while by some experiments, it has been found that the traction of the wheels on a level road is to that on a good rail-road as twenty to one.

“It is at once evident, that a smooth wheel will roll along a smooth plane of iron much easier than it will roll along a plane covered with rough and lose stone; for in the latter case, it has either to be lifted over the inequalities, or it has to push them on one side as it passes, or to crush them.”



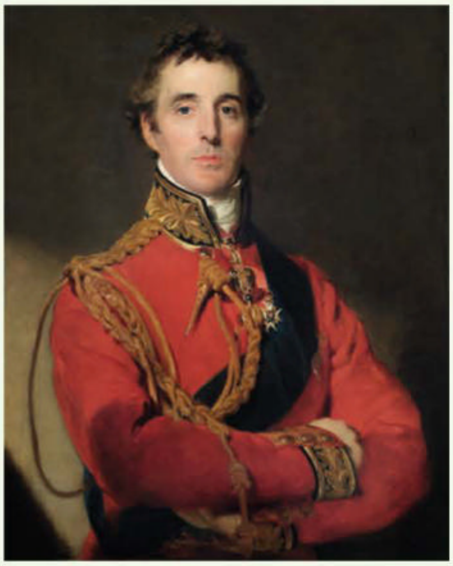
The supplement concludes:

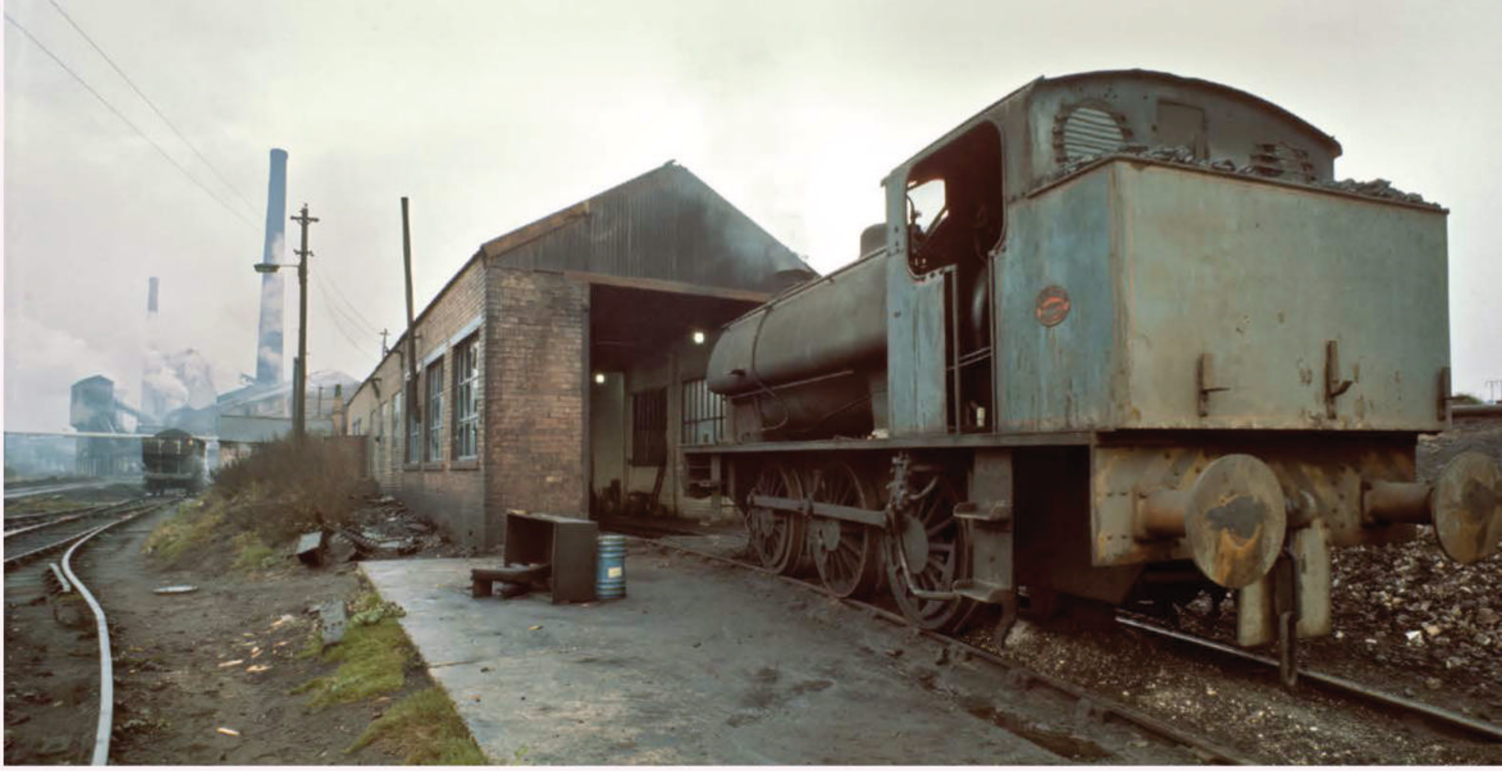
“A trip, as it is called, by the extraordinary road for the first time is an event which cannot readily be effaced by the recollections of more common modes of travelling. A pleasurable wonder takes possession of the mind, as we glide along at a speed equal to the gallop of the racehorse.

“It might be supposed that so great a speed would almost deprive the traveller of breath, and that he could not fail to be unpleasantly conscious of the velocity with which he cut through the air. The reverse is, however, the case; the motion is so uniform, and so entirely free from the shaking occasioned by the inequality or friction of common roads, that the passenger can scarcely credit he is really passing over the ground at such a rapid pace, and it is only when meeting another train, and passing it with instantaneous flight, that he is fully aware of the velocity of his career.

“The novelty of the scene is delightful: now, where the natural surface of the ground is at its highest, we travel embosomed in deep recesses, and then, where the ordinary course of the road would lead through a valley, we ‘ride above the tops of the trees’, and look down upon the surrounding country. The reflecting traveller probably falls into a pleasing vision arising out of the triumph of human art. He sees the period fast approaching when the remotest parts of his own country shall be brought into easy and rapid communication; and he looks beyond this probable event of a few years, to the more distant day when other nations shall emulate these gigantic works of peace. He sees the evils arising out of the difference of language, and soil, and climate, all vanishing before the desire of mankind for peaceful commercial intercourse; and as he knows that the prejudices and mistakes which separate one district of the same nation from another are broken down by such noble inventions as these, he feels that the same spirit of civilization which results from that exercise of our reason, which is bestowed by a beneficent Providence, will eventually render all men as brethren, and children of one great Father.”

Sir Arthur Wellesley, 1st Duke of Wellington, appeared solemn amid cheers and jeers; public reaction was mixed – admiration clashed with political hostility and industrial excitement at the L&MR opening.





My first view of the engine shed at Smithywood with Hunslet Austerity No.3888 built in 1964 standing in light steam. It's lunchtime and no-one's about. In the distance can be seen the coking plant.

DANTE'S INFERNO

SMITHYWOOD COKE OVENS

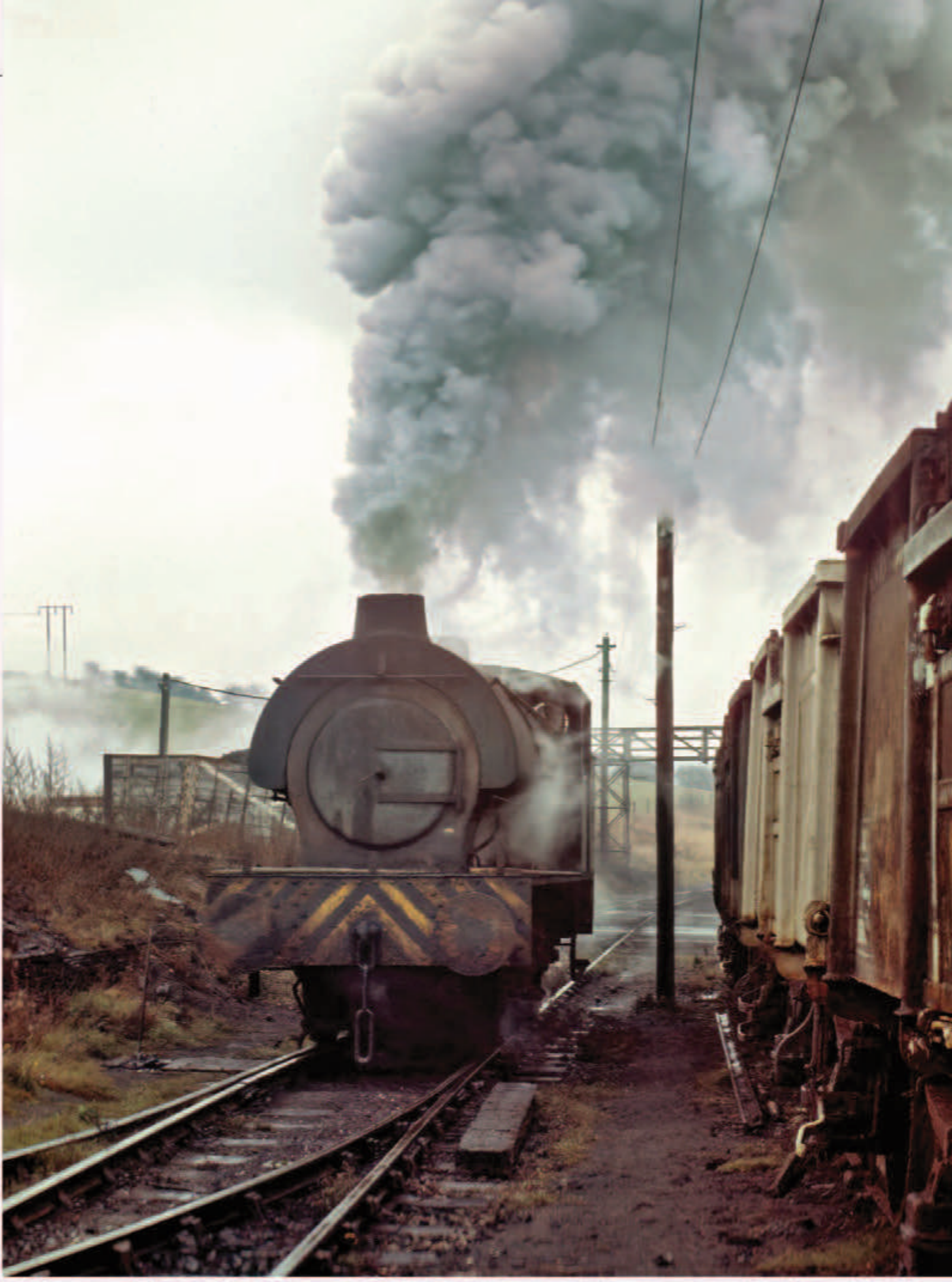
Described and photographed on 11th November 1975 by **JONATHAN GUILBERT**

Steam plumes and bleeder flames on the top of massive coke retorts could be seen from the M1 motorway between Chapel Town and Sheffield. I'd travelled along that part of the M1 gagging from the smell of rotten eggs and wondering whether this large environmental disaster called Smithywood Coke Ovens was capable of sustaining working steam locomotives.

At the time I was a graduate trainee working at Granada Television in Manchester on a series called *The Wheel Tappers and Shunters Club,* a variety show compered by Bernard Manning. The show was recorded in the evenings and gave me a day off during the working week as compensation. So on a wet cold Tuesday morning in November 1975 I headed east on a 40-mile adventure to Smithywood with a copy of *Industrial Locomotives 1973* and an OS 1in scale map to find my way into the plant. Parking in Johnson Lane off the A6135 I found the footpath leading first under the Midland main line from Sheffield then, half a mile further on, under the truncated Great Central line from Wombwell. Climbing a footbridge over sidings, I made my way to the engine shed, south of the Smithywood complex. The purpose of this convoluted route was to avoid detection from the main works which could risk being denied access.

This is the three-man team that turned up after my arrival. The two men with tan coats were from the maintenance shop to examine the engine with the driver, in donkey jacket and wearing gloves. Interestingly not a flat cap amongst them. The place was too dangerous for anything other than safety helmets.

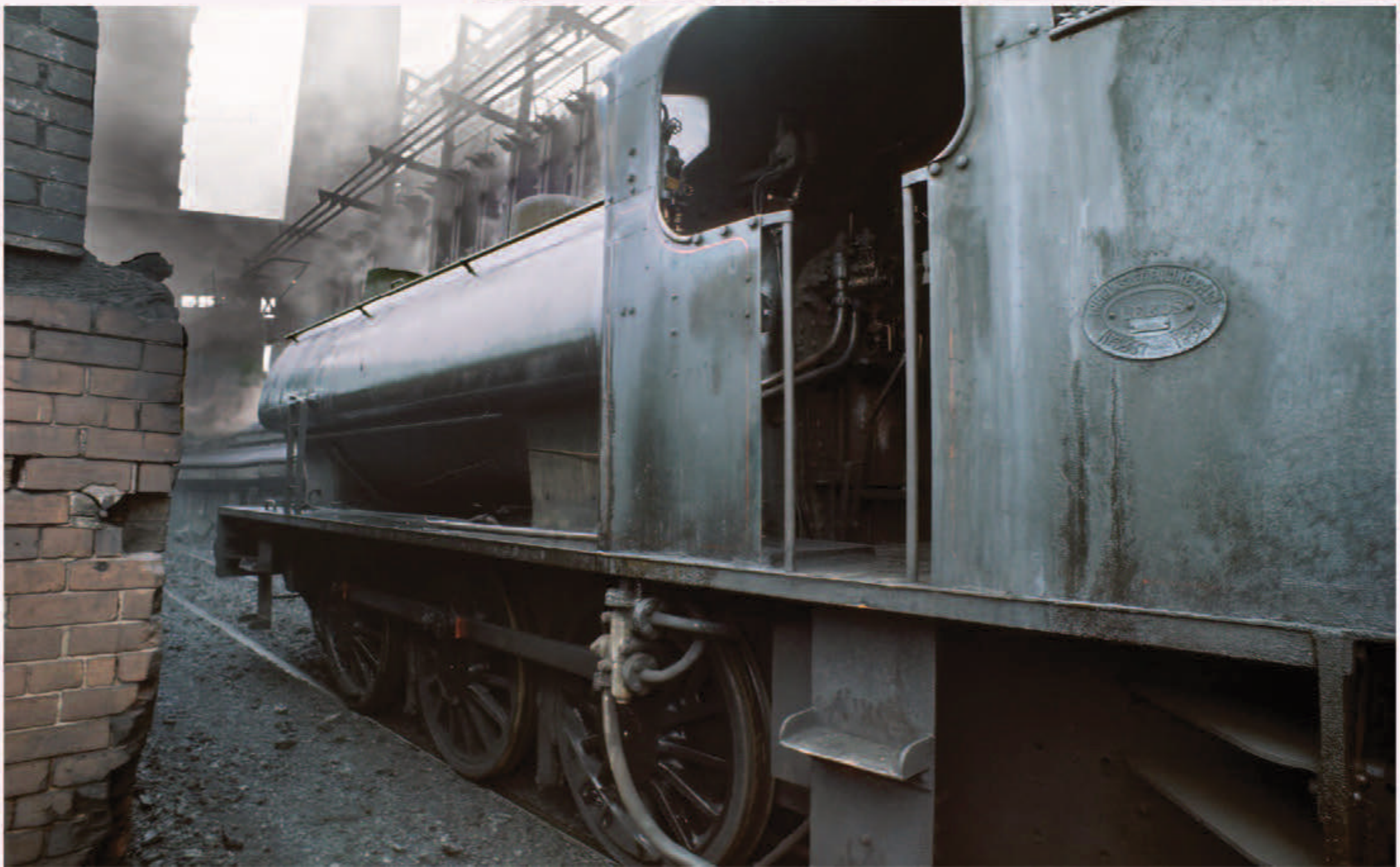
At the engine shed an 'Austerity' 0-6-0ST was in light steam. As I took some photographs three men approached and I naturally assumed they were the reception committee to escort me off the premises. I nodded 'hello' and they started discussing the engine. They didn't seem too bothered about my presence. One of them was taking notes as the driver discussed maintenance issues that concerned him and they were happy to let me listen. This boded well for the rest of my visit. Two of the men were supervisors in tan-coloured overall coats and the third, the driver, was in a donkey jacket, cardigan and wearing thick gloves. Once they'd completed their inspection I asked them the whereabouts of the other engine. They were happy to explain that the electric locomotive, designed especially for coke oven operations, had broken down and the other engine was filling in. They explained the two steam locomotives were the last 'Austerities' sold by the Hunslet Engine Co. in 1964. Both were rebuilds from engines manufactured in the 1940s by Hunslet and modified by Argentinian engineer Livio Dante Porta for single-manned operation. They were also more powerful and had better thermal efficiency than the standard designs. Unfortunately, besides the Lempor exhaust system, all these improvements, including the underfeed stokers, had been removed due to maintenance issues. They added they were happy for me to look round and take photographs, even suggesting I walk down to the ovens to see the other engine. A 'red letter day' for me as it was unusual to have two locomotives in steam at Smithywood.



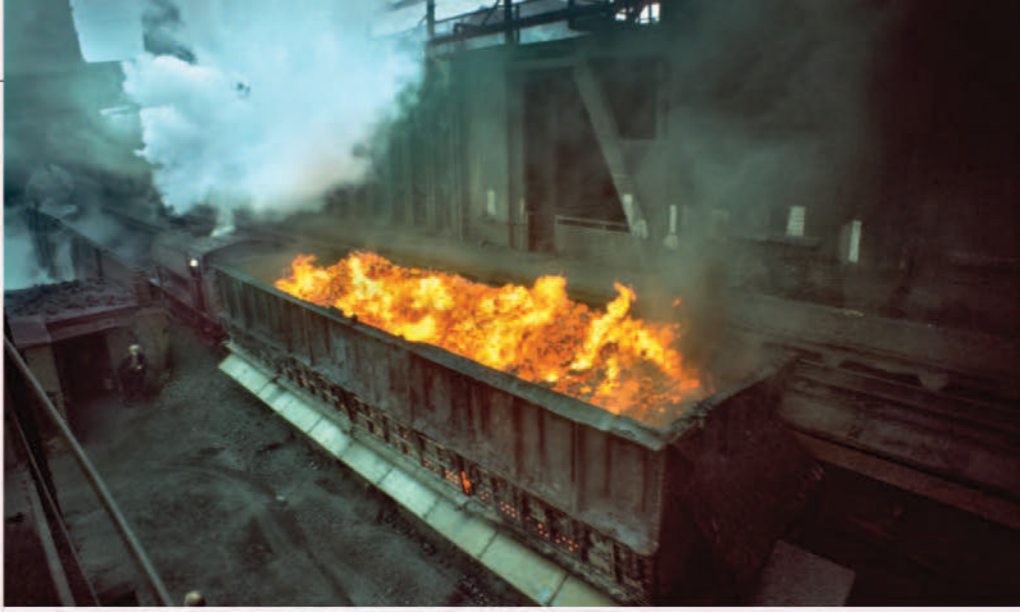
The examination of the engine complete, it storms past me to find full coal wagons to shunt. I'm on my way to the main works.

As I walked the quarter mile or so through the siding of 16-ton coal wagons, the engine from the shed came blasting past looking for wagons to shunt. With some trepidation I carried on towards the inferno. There couldn't have been a scarier place to visit other than the rim of an active volcano. The noise, the flames and the smells – no words could adequately describe. Flames were licking round the doors of huge ovens as though hell was beckoning my arrival. A railway ran along a ledge below the ovens with a steep drop on the other side into a tangle of bunkers, pipes and tanks for collecting the valuable by-products from the coke making. Standing passively on this ledge beneath the ovens was the second 'Austerity', coupled to a large bogie gondola wagon ready to receive the red hot coke. Two guys who looked after the area kindly offered me a cup of tea in their cabin and explained how to keep safe and not disappear under a pile of flaming coke or melt my shoes on hot gratings. A driver appeared, different from the one I'd met earlier, and told me they were about to do a 'push' in ten minutes. I walked briskly outside around the locomotive looking for a spot from which to photograph the event.

Finding a gantry above the gondola I stood and waited. The huge doors of the oven slid open and the 'push' began as a hydraulic ramp forced the red hot burning coke into the gondola below. There was a sudden up-rush of hot air that burnt the hairs off the back of



As with its sister engine, Hunslet fixed new works plate depicting 1964 as the build date though the engine was actually built in 1944. The original works number was 3193 but after the extensive rebuild Hunslet felt it appropriate to give the two locomotives new identities.



My first attempt at shooting the the 'push' but missing the falling of flaming coke into the gondola due to the heat. The fiery load of coke is being rushed to the quenching tower under the archway ahead. The chap leaning against the small brick building on the left is the one who, with his colleague, offered me a cup of tea and advise on how stay safe around the ovens.

my hand holding the camera. I turned away to protect myself, missing the first shot but recovered sufficiently to get another as the fiery load moved off toward the quenching tower.

The engine was soon back again and a worker attached an air hose to the back of the gondola to open the side door and dump the quenched coke into a large hopper below. I repositioned myself a little further away for the next avalanche of hot coke and decided to using a telephoto lens rather than the wide angle one as before. Another oven door opened and the fiery coke fell into the gondola. The driver slammed open the regulator to dash the 200 yards past me and extinguish the coke as quickly as possible under the quenching tower. This tower was about 110 feet high and deluged the gondola with hundreds of gallons of water putting out the fire. Out of the top came a huge acidic cloud of steam. During westerly winds, it was alleged, this steam would blow over houses half a mile away and leave holes in the washing drying outside on the clothes line.

After a short wait under the quencher, to make sure the coke was properly soaked, the engine reversed to empty its load. Then the whole procedure started over, forwards and backwards between the coke ovens and the quencher, to unload and reposition for the next 'push'. Though the driver took it all in his stride it must have been a very unpleasant job in a steam locomotive. The open cab gave little protection against red hot coke ricocheting about and the acrid fumes. At least on the electric locomotive, when it worked, it had a fully enclosed cab and probably breathing apparatus.

The staff were friendly and the place exciting to photograph. I stayed until the daylight started to fade and I headed back to Manchester.

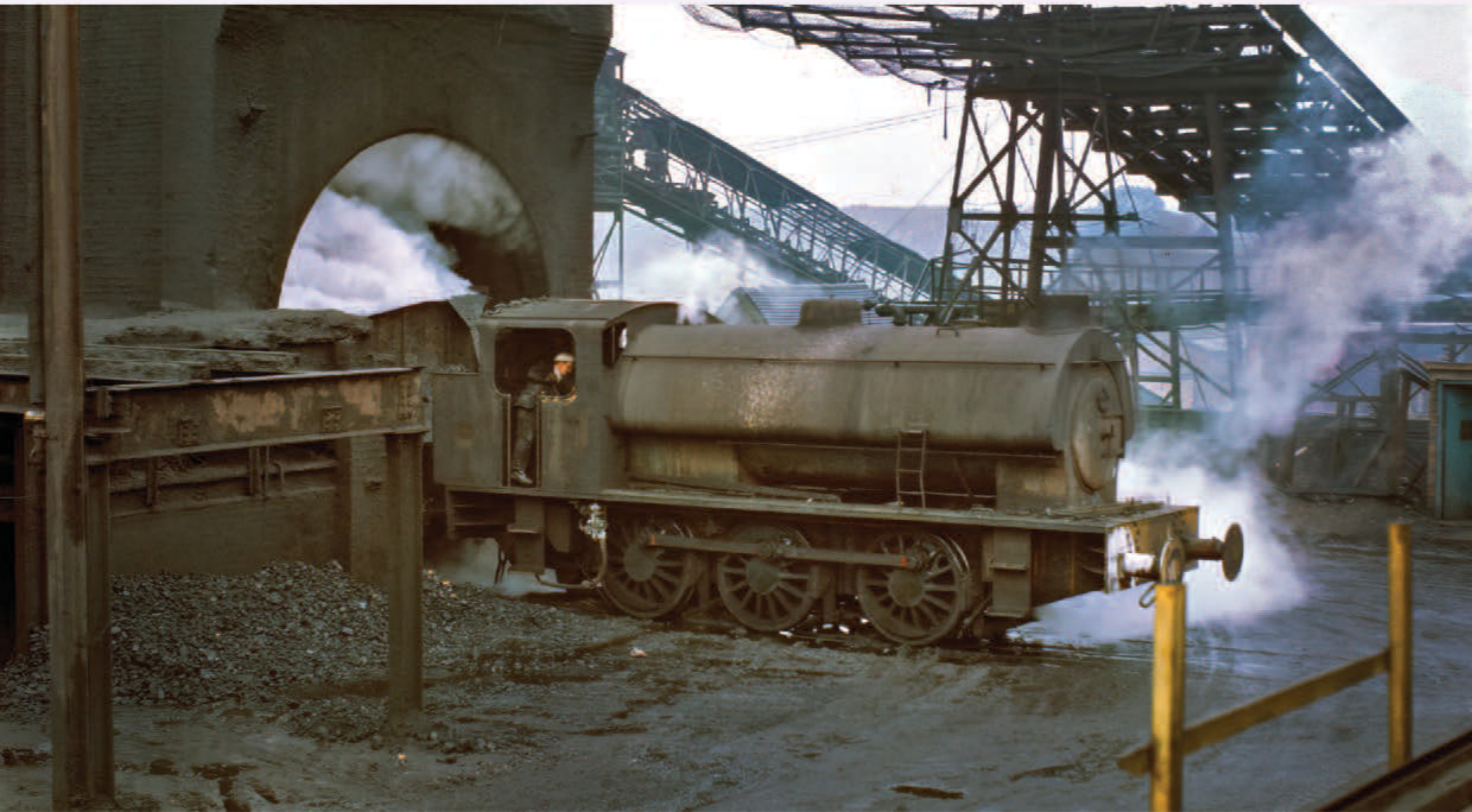
Smithywood turned about 400,000 tons of coal into coke a year. The coal was burnt in the coke ovens at 900 and 1,100 degrees Celsius for fifteen hours in a controlled oxygen-free environment. This drove off the volatile gases, leaving a porous high-carbon residue behind called coke. This was used in blast furnaces to turn iron ore into pig iron, an important part of steel making. The volatile compounds released during the burn were collected to be rendered into household disinfectant, ammonium sulphate, crude benzole, tar and town gas for Sheffield. When working at full capacity the ovens at Smithywood discharged every twenty minutes.

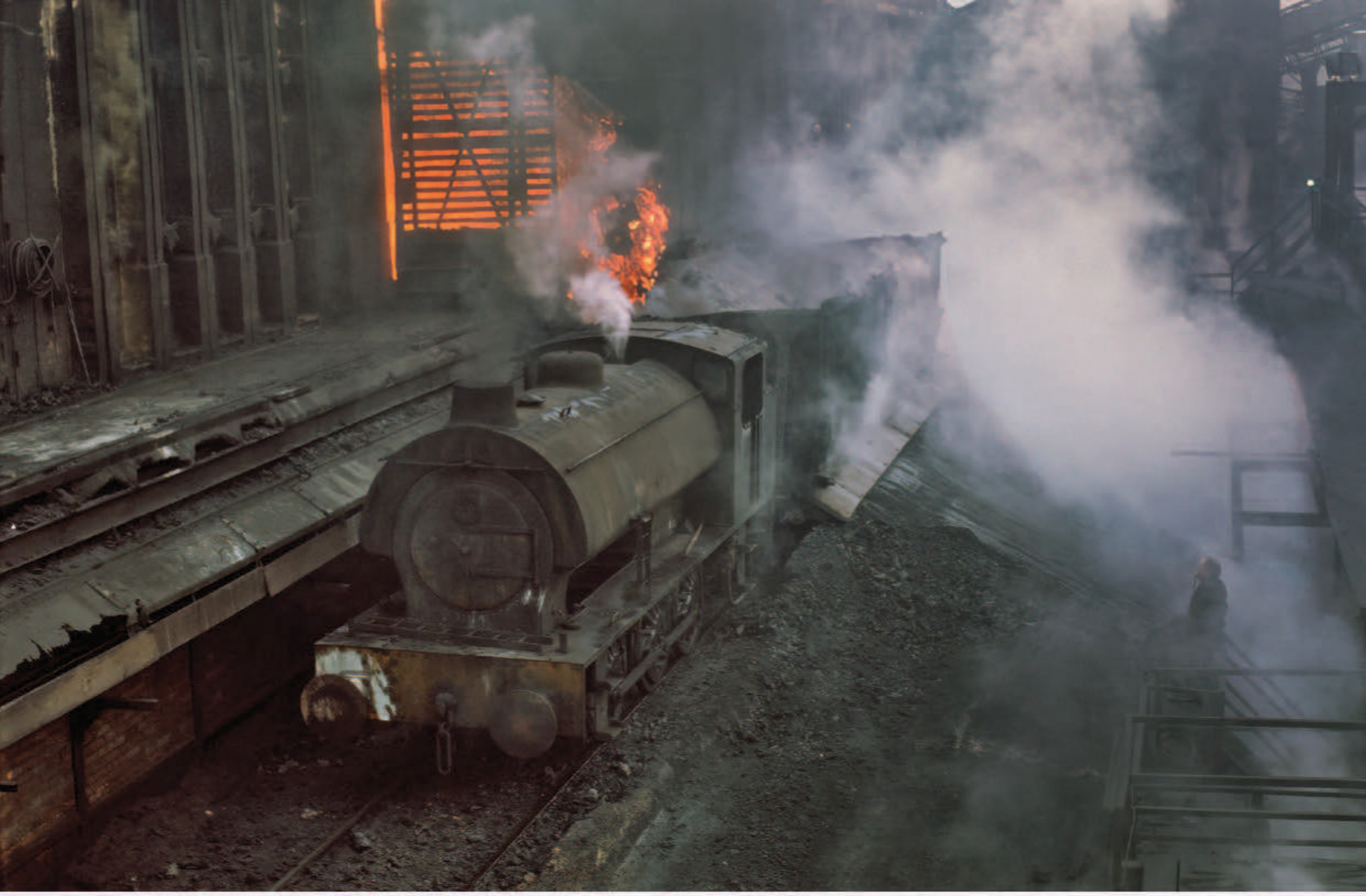
Owned by National Smokeless Fuels, the works closed in 1986. Demolition followed a year later, after which the site was decontaminated and redeveloped into a business park. Fifty years on since I photographed the 'push', a vast warehouse called 'Advanced Supply Chain' now occupies the very spot where I stood with my camera. The last coke oven in the UK closed in 2024, making it unlikely pig iron will ever be produced in this country again.

The steam locomotive, Hunslet Works No.3887, the one working the ovens, was preserved in 1978. As of March 2024 it is reported to have been acquired by the Northampton & Lamport Railway. Its sister, Hunslet Works No.3888, photographed outside the shed, soldiered on for another four more years until 1982 when it was replaced by a diesel shunter. It's currently being overhauled at the Barrow Hill Roundhouse.

Check out my YouTube channel:
youtube.com/@GandyDancerProductions

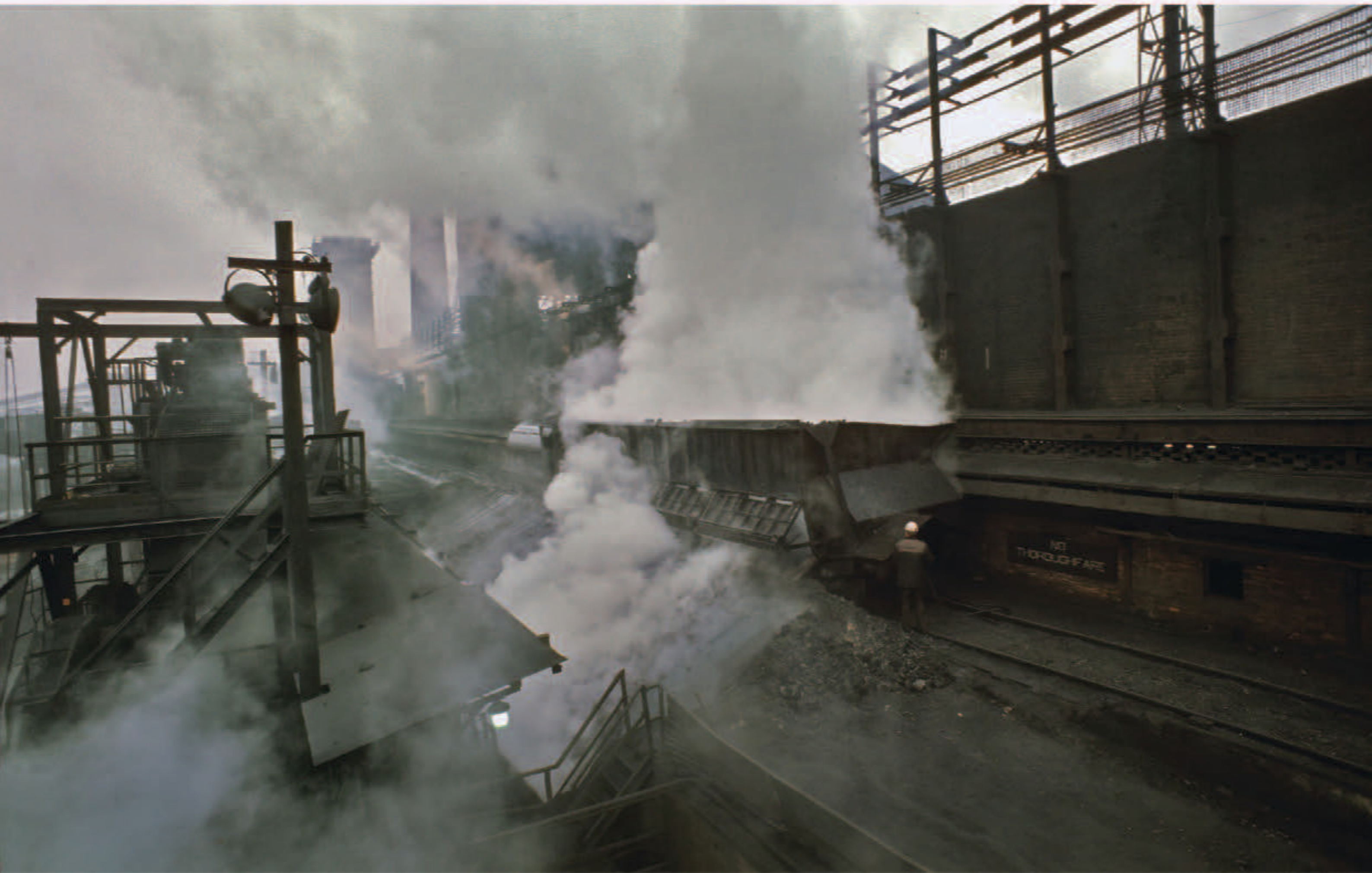
The engine with the gondola spent about fifteen minutes under the quencher. The driver is thanking the coke gods that the acrid steam is being sucked up the quencher chimney and not blown all over him and his locomotive.

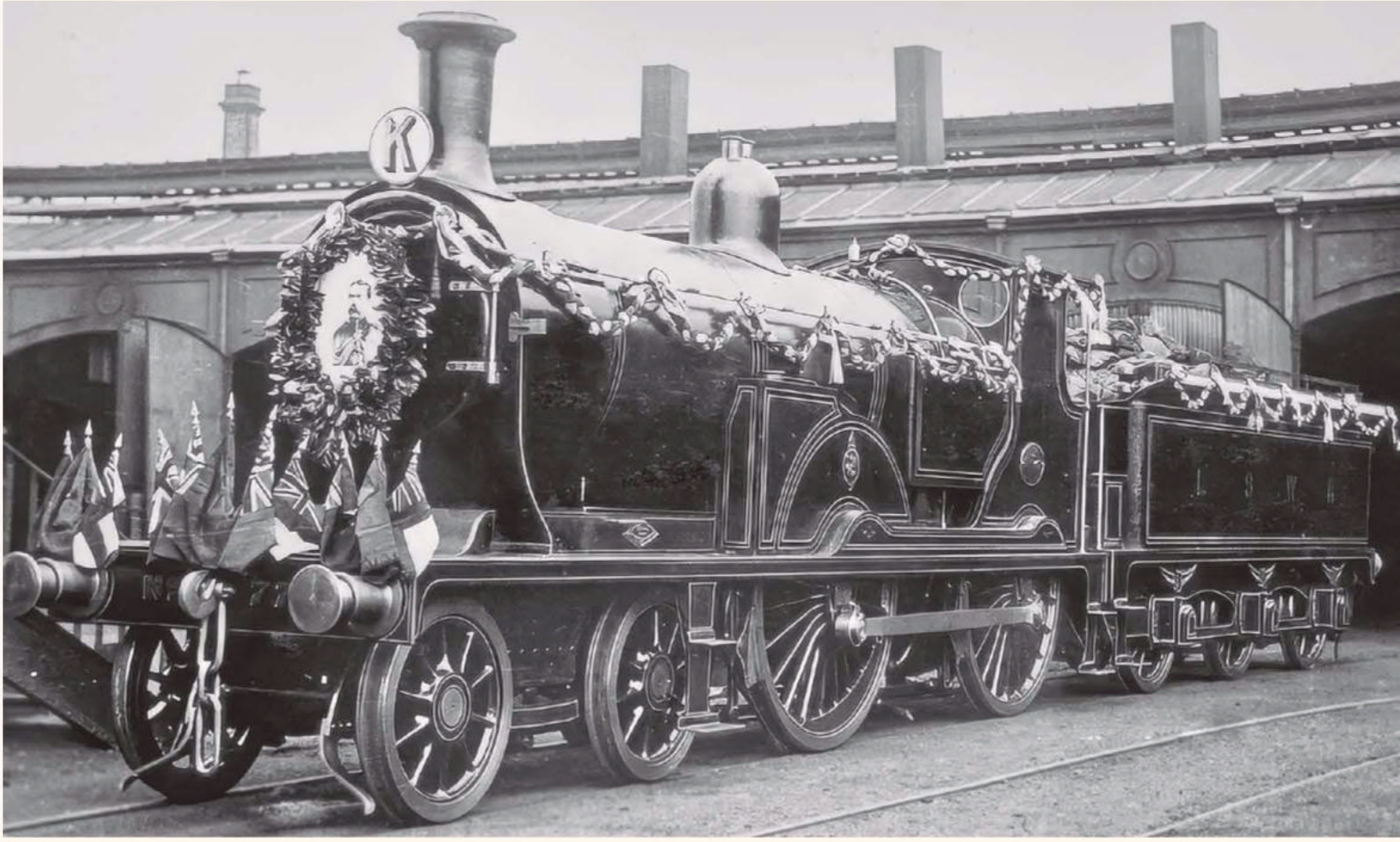




ABOVE: **A 'push' without the blasting heat scorching the hairs on my hand this time. I'd found a position further away and used my telephoto lens. This is a dangerous operation where so much could go wrong if the engine didn't position itself in just right spot. Amongst the steam and fumes on the right is a supervisor whose job is to indicate to the driver which oven is to be 'pushed' next and help him position his train.**

BELOW: **The engine has come back along the ledge against the ovens to tip the quenched coke into a chute and a hopper below. A worker has connected an airline temporally at the back to open the doors of the gondola to facilitate the operation. With regard to the notice on the wall, I'm sure no-one in their right mind would have mistaken this as a thoroughfare.**





On 12th July 1902 4-4-0 No.773 headed a special London & South Western Railway train which carried Lord Kitchener, the returning Commander-in-Chief in South Africa, from Southampton West station (departing at 10.40am) to Basingstoke (arriving 11.31). There a GWR engine was attached to the LSWR train and the whole proceeded to Paddington, leaving Basingstoke at 11.49 and arriving in London at 12.50. (Didcot Railway Centre)

BRITAIN'S RAILWAYS AND T

BY BERENICE BAYNHAM

In early 1901 the Yeomanry and the Volunteer companies began to return to England from South Africa, having completed their one year's active service, and in some cases they were replaced by further drafts of Volunteers and Yeomanry. By now public support for the war was slowly diminishing – it was to drag on to May 1902 – and it wasn't as easy to find enough men prepared to volunteer as it had been in the early months of the war. The public send-offs tended to become more muted, but not so the displays of enthusiasm on the return of the active service volunteers.

Refreshments (2)

In early October 1900 Lord Wolseley, the retiring Commander-in-Chief of the Army, issued an appeal to the country that the return of British troops from South Africa should not be made an occasion for excessive drinking and asked the public not to treat the soldiers to alcoholic drinks.

"The War Office has been for some time in correspondence with the various railway companies as to serving soldiers at the railway refreshment bars. As a result a scheme has been drawn up under which tickets to the value of 6d. have been printed and will be on sale in the G.E.R. [Grest Eastern Railway] Company's bars on and after February 1, entitling every soldier, reservist, and sailor to certain refreshments on presentation of the ticket at any of their refreshment rooms. It is believed that the arrangement will tend greatly to do away with the indiscriminate treating of the soldier and sailor, and it is to be noted that no intoxicating liquors are included in the refreshment provided under this scheme. The 'Star' gives the following list of articles provided for sixpence: (a) Two sandwiches, or bread and cheese, together with half-a-pint of tea or coffee or cocoa, or a bottle of aerated water, or (b) Piece of cake with either three slices of bread and butter, or roll and butter, or (c) A portion of meat pie. For 1s.: (a) Cold meat and bread and cheese, or (b) A portion of meat pie with two cigars or 1oz. of tobacco, together with half-a-pint of tea or coffee or cocoa, or a bottle of aerated water." (*Worcestershire Chronicle*, Saturday 2nd February 1901)

"The War Office last night issued the

Carlisle Citadel station, with the 'Scotch Express' departing. Soldiers and sailors in uniform would have been able to obtain food and non-alcoholic drinks on presentation of 'refreshment tickets' to the face value of sixpence. (T. J. Edgington Collection)

PLATFORM
AIN LINE
REFRESHMENT ROOMS

HE BOER WAR 1899-1902 PART THREE

The Midland Railway's 1885 extension at Birmingham New Street Station. Both New Street and Lansdown (Cheltenham Spa) were vital junction stations in the movement of troop trains to and from Southampton during and immediately after the war.
(Copyrighted free use, Wikipedia)

following:– In consequence of a desire expressed for some suitable arrangement by which the public can provide soldiers returning from the front with refreshments other than alcoholic liquors, it has been arranged, between the Secretary for War and the principal railway companies, that refreshment tickets of the face value of sixpence each shall be on sale at the booking office of the principal stations of Great Britain and Ireland on and after July 1st. These tickets will be available for use by soldiers and sailors in uniform at the refreshment rooms at all railway stations in Great Britain and Ireland, and will be valid for food, non-alcoholic beverages, or tobacco. In view of the special circumstances of soldiers returning from South Africa, the companies concerned have undertaken to deal liberally with those who present these tickets in regard to the amount of refreshments provided." (*Aberdeen Journal,* Tuesday 25th June 1901)

"The War Office has issued the following list of railway companies which have agreed to issue non-alcoholic refreshments to soldiers and sailors in uniform on presentation of 'refreshment tickets':— Barry; Cambrian; Cheshire Lines Committee; Furness; Great Central; Great Eastern; Great Northern; Great Western; Highland; Hull and Barnsley; Isle of Wight; Irish Railways; Lancashire and Yorkshire; London and North-Western; London and South-Western; London, Brighton, and South Coast; London, Tilbury, and Southend; Metropolitan; Metropolitan District; Midland; North-Eastern; North London; North Staffordshire; and Rhondda and Swansea Bay." (*Evening Express*, Thursday 5th June 1902)

The above measures may have lessened the amount of over-indulgence in alcohol by returned men, but they didn't eliminate the problem completely.

Soldiers, trains and alcohol

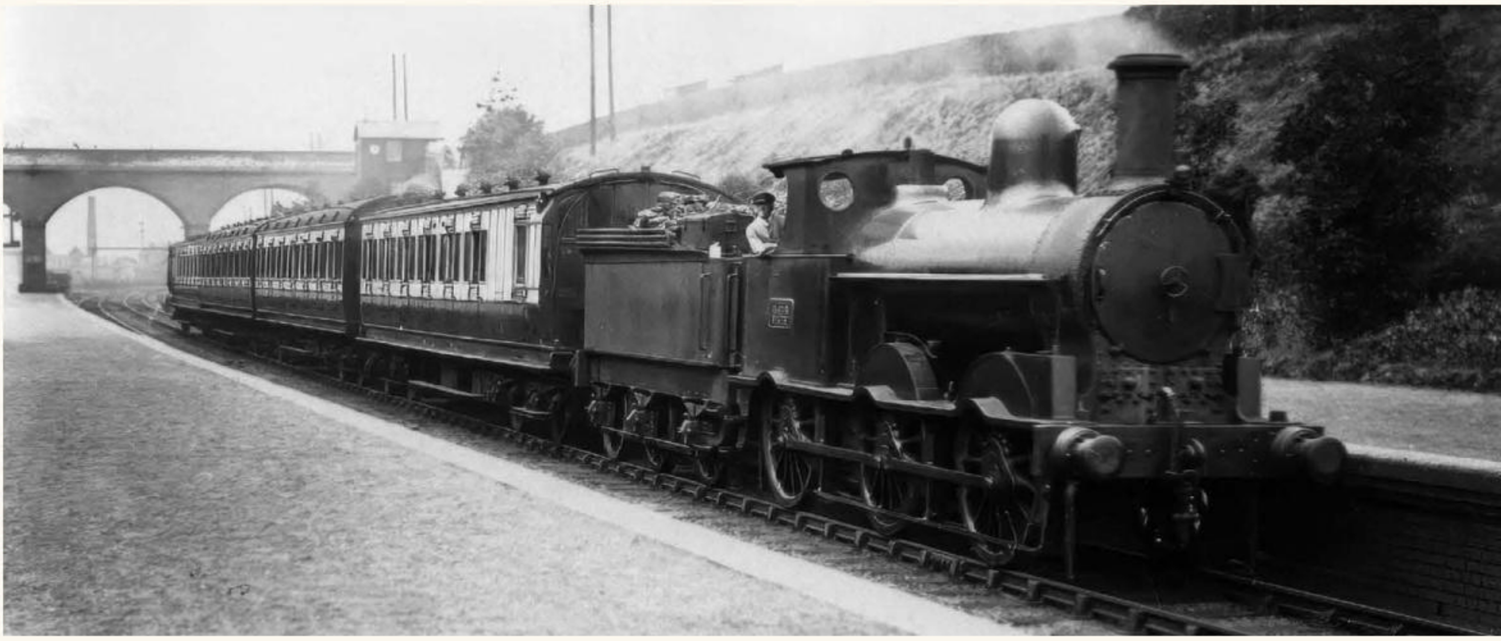
Some examples of soldiers returning to the UK and drinking too much, to their own detriment:

Alexander Whittaker, Inniskilling Fusiliers, and Michael Mulvaney, possibly of the Royal Dublin Fusiliers, had both been invalided from South Africa to Netley Hospital, near Southampton, from where they were discharged on Tuesday, 5th February 1901. They travelled up to London the same day, and proceeded to Euston station with the intention of returning home to Ireland, via Holyhead, on the London & North Western Railway, but with time to spare before their train left, they visited the local pubs, returning to the station for the 10.15pm departure, where they were locked into a compartment because of their boisterousness. As the train was leaving the station Mulvaney was seen leaning out of the window, shouting "Hurrah" – at 11.40 he was found on the up line, just under a mile from Euston station and near the Oval Road bridge, with both legs cut off. Whittaker was woken at Crewe station, the first stop from Euston, where a window was found to be broken in the compartment, with most of the glass missing. Claiming to be unaware of what had happened, he was arrested and charged with throwing Mulvaney out of the window. Mulvaney could later recall nothing between boarding the train and waking up in hospital, but when the case finally came to court, on 15th March, he was well enough to appear there, and spoke up for Whittaker, who was eventually discharged.

Private John Ross, of the Royal Scots, had arrived in Southampton on 23rd April 1901 and was travelling from Bristol to Edinburgh on a Midland Railway express train. He was in a compartment with other soldiers, and fell out of the carriage near Methley, south of Leeds, fracturing his skull. All the party were the worse for drink, and were unable to give an account of the accident; Ross died in Leeds Infirmary on the 24th.

A second fatal accident on the Midland Railway occurred the other side of Leeds, less than three months later on 18th July, when Private George Twigg, Royal Scots Fusiliers, was found unconscious by the line about 200 yards before Kildwick and Crosshills station. After having travelled from Southampton to Leeds, Twigg and six other soldiers had there changed to a Glasgow train, intending to change again at Kilmarnock for the regimental depot at Ayr. Whisky was obtained at Leeds, the Glasgow train leaving there at 02.02, and on its arrival in Skipton at 02.36, it was discovered that Twigg was missing; once again drink was the probable factor of his opening the door of the compartment and falling out, dying in Bradford Royal Infirmary later that morning.

"A draft of the 2nd Battalion of the East Yorkshire Regiment, together with several other drafts from Africa, left Southampton in a special troop train on Tuesday [29th July 1902]. The train was a composite one, and travelled by way of Andover, Cheltenham, and Derby



The MR station at Pear Tree and Normanton, near Derby, was where the men of the Sherwood Foresters detrained but its small size meant that the waiting crowds had to be kept outside. This LNWR Walsall–Derby train is headed by one of its '18in Goods' 0-6-0s No.909. (John Alsop Collection)

to Beverley, where the Yorkshire soldiers detrained. The men from other regiments were put down at various other places. Shortly after the train passed through Derby station Herbert Fletcher, a Midland Railway lampman, of Willington, found a soldier on the line near to Stenson Crossing. He was quite dead, and the body was in the four-foot between the lines. It had apparently been dragged for some 20 or 30 yards, there being marks on the cinders in the four-foot and blood marks in several places. His head was broken open, and his brains had been knocked out. His left foot had been run over, and was nearly cut off, whilst numerous bones were broken."

"On Thursday [31st], Mr. W. H.. Whiston opened an inquest at the Green Man Inn, Willington, on the body of Private Michael Doolan, 2nd East Yorkshire Regiment, who fell from a train while travelling from Southampton to Beverley, on Tuesday.

"Sergeant Morrall deposed that the regiment returned from South Africa on Tuesday. At five o'clock the same afternoon they left Southampton by special train for Beverley. Deceased and six other men were in the next compartment to the one in which witness travelled. Deceased and his companions were all drunk when they left the ship, and they got more drink on the way.

"The Coroner: How?

"Witness: By breaking away from the train, and going into public-houses; and other men joined. Witness added that they had two dozen bottles of beer in the carriage, and Captain Brown ordered witness, if he saw them with any more, to take it off them. He afterwards saw a man taking six more bottles of beer into the compartment, and witness tried to get it away. There was a struggle, in which the other man joined, and witness only succeeded in getting three bottles from them. Captain Brown, fearing a riot, then told witness to leave the men alone. About five miles south of Derby, one of the deceased's companions tapped on the window of witness' compartment, and told him deceased had fallen from the train. The communication cord was pulled, and the train stopped, but a search party failed to discover his whereabouts. After considerable delay, the train was obliged to proceed without him. Next morning, his body, shockingly mutilated, was found on the line." (Reports from the *Derby Daily Telegraph* and *Hull Daily Mail*)

British railwaymen on active service

Of the thousands of railwaymen who went out to South Africa on active service, we can pick out two Great Western Railway employees, George Henry Richard Stroud, signalman, and Joseph Gardner, porter, who both left Ebbw Vale Low Level station for London in early January 1900, after volunteering for duty in South Africa with the St. John Ambulance Brigade. A large crowd saw them off from the station. Another man of interest is Private Squire Mangnall, of the (Cameronians) Scottish Rifles, who had been a parcel porter at Bury Bolton Street station, and then signalman at Clough Fold station, before being called up as a reservist in October 1899. He died in hospital at Spearman's Camp from wounds received during the engagement at Spion Kop on 20th January 1900. A memorial stone erected to his memory in the graveyard at the Park Independent Chapel, near Ramsbottom, seems to have been lost.

A notable memorial that commemorates railwaymen who served and died in the Boer War is that to the 'Staff of the Midland Railway' memorial on Platform 1, Derby station, which names 68 Reservists, Volunteers and Yeomanry who left its employ to serve in the Army and who died in South Africa.

Railwaymen who returned from South Africa weren't always able to take up their posts again. Corporal H. Cooper, of the Duke of Cornwall's Light Infantry, was shot in the head during a battle on 18th February 1900 and left blinded for life. He had been in the employ of the Great Eastern Railway when called up as a reservist and on returning to England found that he wasn't entitled to an Army pension.

A busy day at Southampton

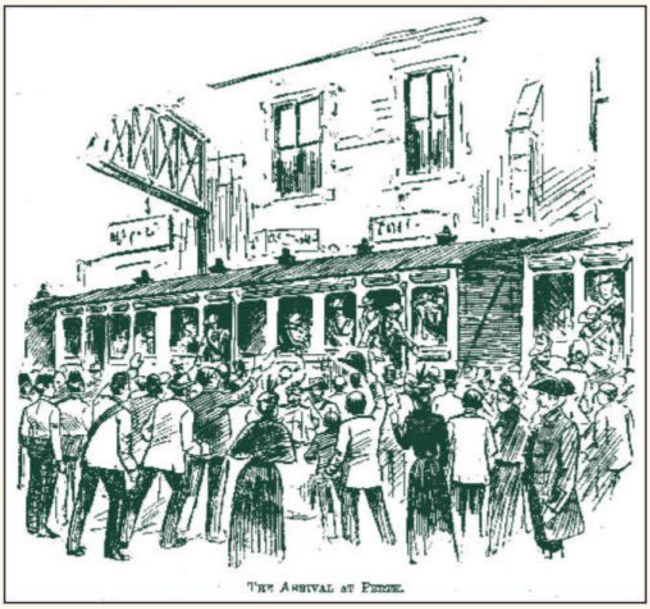
The arrival of SS *Tagus* there on Monday 29th April 1901, with 27 officers and 1,031 men of various Active Service Companies, received good coverage in various regional newspapers, and gives us a glimpse at how much organisation must have gone into the dispersal of the companies to all parts of Britain. The ship docked at about 7.00am and the first to leave was the Royal Warwickshire Regiment, with three officers and 100 men, followed by the Cheshire and Derbyshire Regiments, all three entraining early, reportedly about 30 minutes after leaving the ship.

"The disembarkation at Southampton having been successfully accomplished, the various special trains conveying the troops were dispatched with the promptitude and punctuality which has characterised the administration of the trooping arrangements of the London and South Western Railway during the war. The Warwickshire men early entrained for their long journey to the Midlands, this being additionally long owing to the circuitous route over which the men were taken. (*Leamington Spa Courier,* Friday 3rd May 1901

The Warwickshire, Cheshire and Derbyshire Volunteers travelled by the Midland Railway, via Cheltenham High Street, and arrived at the Midland's 1885 extension at Birmingham New Street shortly before half-past two. There the Warwickshire and Cheshire men detrained, with the train continuing on to Derby, and the Sherwood Foresters (Derbyshire Regiment) reached Pear Tree and Normanton station 40 minutes late, at 15.40. "The station is a small one, and only a few persons were admitted, but there were crowds, amounting to many thousands, in the vicinity, and when the train stopped, vociferous cheers went up." (*Sheffield Daily Telegraph*, Tuesday 30th April 1901)

Back at New Street, the Warwickshire Active Service men were marched through the subway from Platform 4 to Platform 1, where they had lunch on beer and sandwiches (hopefully the Cheshire men did likewise), before taking the 2.35pm LNWR train to Warwick (Milverton) station, cheered away by the crowd that had gathered at New

Street. The enthusiastic spectators then waited for the departure of the Cheshire men, at 3.35, Chester being reached at 5.40.


THE ARRIVAL AT PERTH.

The arrival at Perth station of the Black Watch Volunteers, having travelled from Southampton, via Carlisle and the Waverley Route. Many of the Volunteers travelled on from Perth by various trains to Dundee, Blairgowrie, Alyth, Dunkeld, Pitlochry, Dunfermline (Lower station), Ardler, Aberfeldy, Cupar, Kirkcaldy, Anstruther and St. Andrews. (The *Evening Telegraph,* Dundee)

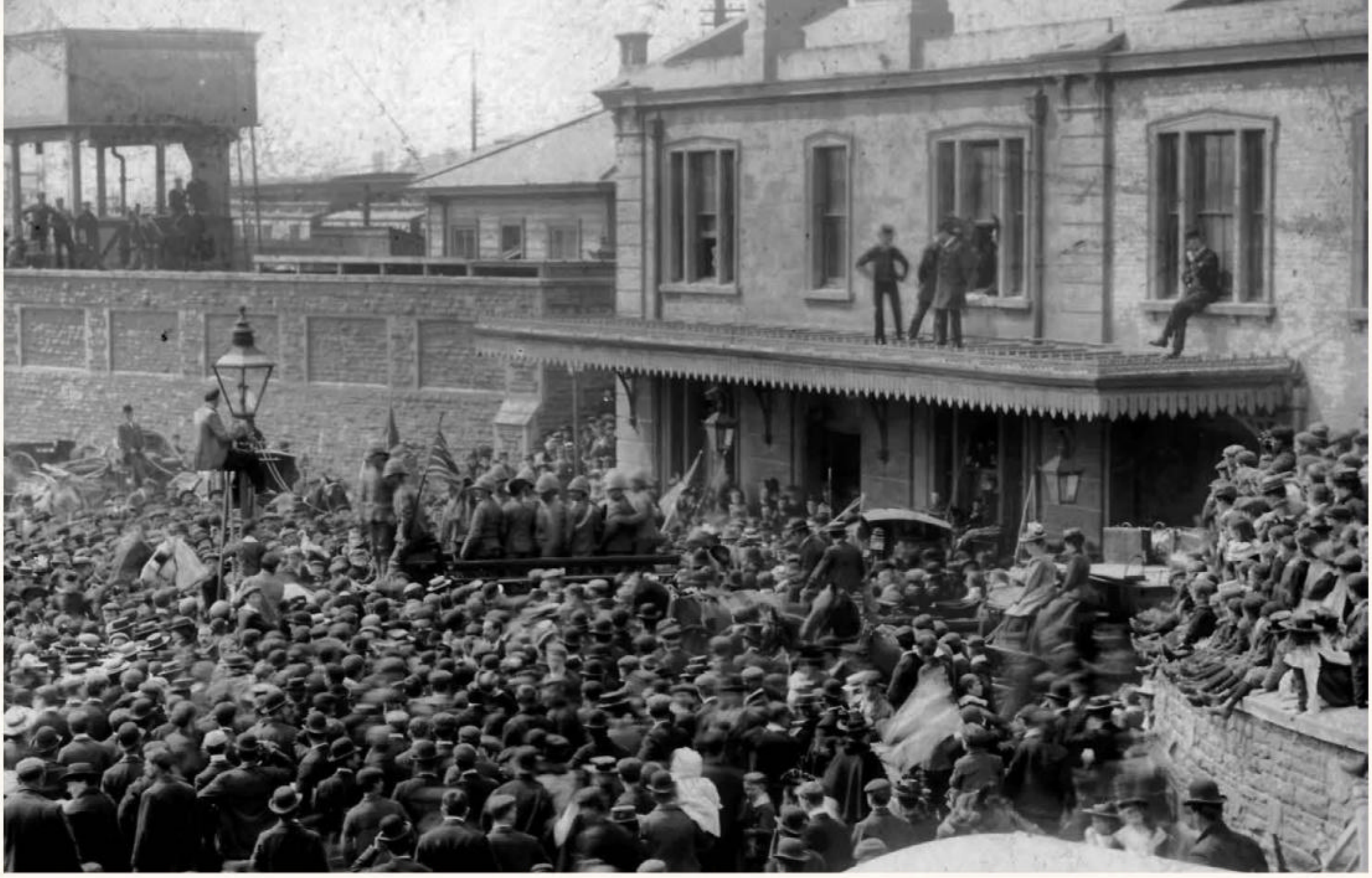
"The news that the men would arrive at Milverton – when known to be authoritative – proved the signal for an immense crowd to assemble at Milverton Station to do honour to the returning heroes. Sometime before 3 o'clock a posse of the Leamington police force hastened to the station to control the crowd, whose enthusiasm was particularly exuberant. The general public were excluded from the station platform, although at the last moment a considerable number of relatives, friends, and interested spectators managed to obtain admission by various subterfuges. The most popular of these was to travel down from Leamington by a train arriving shortly before that in which the Volunteers were returning, then take up a position on the platform, and cling tenaciously to it in spite of everything and everybody. From the down platform it was possible to while away the brief period of waiting by watching the movements of the vast crowd which had assembled below. As far as the eye could reach interested spectators had taken up their positions at every point of vantage, and the number constantly increasing, the police had a busy time of it. About 2.30 a train rolled in from Coventry and this included amongst its passengers the band of the headquarter companies of the 2nd Volunteer Battalion of the Royal Warwickshire Regiment, who took up a position on the up platform. A military fatigue party from Budbrooke, in charge of a stalwart sergeant next arrived, lending an additional touch of colour to the scene by reason of their scarlet coats.

"It was now evident that the train conveying the Warwickshire lads was not far off, for considerable bustle and commotion was being displayed by the railway officials. Meanwhile, however, the period of waiting was relieved by selections from the Volunteer band. A few moments later, almost before the crowd realised it, the train conveying the Volunteers hove in sight, and the band struck up the strains of 'See the conquering hero comes'. Hats were waved enthusiastically. and as the bronzed Volunteers could be discerned leaning out of the carriage windows, the crowd began to cheer as only a Warwickshire crowd can. As the train slowly steamed into the station the scene was one of the most remarkable ever witnessed at Milverton. Here at length were the Warwickshire lads, bronzed and hardened by fifteen months' exposure, showing in some instances evidence of the hardships they had endured, and here on the platform were their relatives and friends assembled to greet them. Before the train had well nigh come to a standstill carriage doors were opened, the khaki clad Volunteers leaped joyfully from the compartments, and for the next ten minutes the heartiest of handshakes and embraces were taking place on every hand." (*Leamington Spa Courier,* Friday 3rd May 1901)

The MR's Cheltenham Lansdown station was busy on a number of occasions with troops returning from Southampton via the Midland & South Western Junction line. (T. J. Edgington Collection)

Back in Southampton, the Welsh Regiment entrained at 10.00, and reached Cardiff by the Great Western Railway at 2.30pm, while both the 1st London Engineers and the Middlesex Engineers went to London, accompanied by Volunteers of the London Scottish, and the Royal West Kent Regiment went on to Maidstone, all by special trains. Other departures that day from the *Tagus* were the Wiltshire Regiment and the Duke of Cornwall's Light Infantry—some men didn't arrive home until Tuesday afternoon [the 30th], Redruth at 6.24, and Camborne shortly after.

The Border Regiment Volunteers were one of the last companies to leave Southampton that day, arriving at Carlisle at 4.20 Tuesday morning. The diary of an anonymous Penrith volunteer recorded "Many of the companies started to disembark about 8 o'clock, but we had to 'kick our heels' till four, when we got off and at once entrained for our journey north. We started punctual to time at five, a large crowd giving us a lively send-off. We travelled by the Midland Railway, Derby being reached about 1 a.m., where we were served with coffee and sandwiches. The coffee, unfortunately, was served in Boer style, without sugar. We tried to sleep, all being tired through having had little rest for the last two or three nights. We were unceremoniously awakened by the rattle of a number of fog signals placed on the line near Carlisle. The noise brought back to our minds the many times we had been roused by similar sounds in far-off South Africa, but these did not awake the grumbling spirits within us as the others had done. We knew better times were in store and that we should soon be



Boer War soldiers' arrival home at Swindon Junction station in 1901. Possibly the active service Volunteers of the Wiltshire Regiment, who returned to Swindon just before 1.00pm on Tuesday 30th April 1901.
(Local Studies, Swindon Libraries)

among dear friends once more. The train soon entered the station and we were once more in the old Border city of Carlisle.” The Active Service men then had breakfast at the Drill Hall, were treated to a concert, and attended a thanksgiving service at the Cathedral, before the Penrith and Westmorland men left Carlisle by the 11.30am London and North Western train, arriving in Penrith at 12.08. The West Cumberland men travelled to Maryport, Workington and Whitehaven stations by a regular service. Fourteen Volunteers detrained at Workington around 5.00pm and four Whitehaven men arrived at Bransty station at 5.20.

Finally, the Scottish companies – the Cameron Highlanders (to Inverness), Gordon Highlanders (to Aberdeen), and Seaforth Highlanders (to Elgin and Dingwall)—disembarked from the *Tagus* at 5.00pm and departed from Southampton Docks in one special train, stopping at Perth at 9.30am on Tuesday, the 30th, and Aberdeen at 10.05. Thirty-seven men of the Gordon Highlanders left the train at Aberdeen, while the Seaforths continued to Fort George (near Nairn, north east of Inverness), to be dismissed and receive their pay. Some of the Seaforths then went to Elgin West, the Highland Railway station, arriving there around 5.00pm,while other Seaforths reached Dingwall at 4.00pm.

The next day, about 48 hours after docking at Southampton on Monday, and staying Tuesday night in Dingwall Barracks, the Volunteers from Wick and Thurso arrived home in the afternoon of Wednesday 1st May.

The arrival of the Black Watch Volunteers at Perth and Dundee

Perth, Friday morning, 17th May 1901 – “As I write, people are congregating in and round the station. A streamer of flags is suspended along the platform where the men are to detrain. Policemen, Black Watch men, and town's officers add to the gaiety of the scene. The Station Square is barricaded. Crowds of eager workpeople line the route of march. One or two pipers discourse sweet music reminiscent of the Highlands. Towards nine o'clock the Lord Provost and Magistrates make their appearance, followed by a retinue of army chaplains and officers of all ranks – some in khaki, others in the more natural tartan. From the opposite platform the Duke of Atholl, arrayed in an ordinary lowland garb, is taking an interest in the proceedings. Relatives of the home-coming men are admitted to the sacred enclosure. They pass up and down, never still for a moment. To them the occasion is peculiarly personal. Are they not in a few moments to be greeting their long lost children or brothers? Every warning bell that rings strikes their nerves. These last few minutes are the most trying of all to them, and for a second one's thoughts revert to the lads who will not come back. They have gone home indeed to their last long home. Our sympathies go out to their parents, who are so terribly upset. After nine o'clock the station became choke-a-block with spectators. ‘Should be here in five minutes, Captain’, remarked the Stationmaster to an officer at five minutes past nine.

“As the station clock pointed to the quarter past the hour the Volunteer train was descried in the offing. In a few moments a volume of cheering broke as it touched the platform. Louder and louder it grew, and as the engine drew up the excitement was intense. Friends recognised friends in a moment, doors flew open, and there was such a handshaking, and even Scotch embracing, as one sees but once in a lifetime. ‘How are you, Frank? Hallo, Jack!’ and so on all down the line. After a few minutes for a first greeting, the men were formed into line. A thin khaki line spread along the platform. A few men looked really ill indeed; one of them gave way, and had to be borne to shelter by two comrades. Fine, broad-shouldered, hard-as-nails young men, most of the soldiers looked. New men is how I should describe some of them whom I knew before they went out. When the men emerged from the shelter of the station a perfect howl of delight went up from the thousands congregated outside. A genuine Scotch mist was falling, but nothing would damp the ardour of such a crowd. Slowly but surely the khaki-clad warriors dived into the block, and pushed their way along to the barracks.” (*The Evening Telegraph* [Dundee], Friday 17th May 1901)

From Perth, the train proceeded to Dundee where, at Magdalen Green station, the Dundee members of the Black Watch Active Service Company detrained – “The scene at the Magdalen Green was one to be remembered. The welcome which the gallant warriors received was characterised by a demonstration of patriotic enthusiasm only equalled by the ovation accorded to them on their departure for the front. Shortly after six o'clock crowds of expectant sightseers began to stream down all the lanes leading from Perth Road to the Green. As the time of the arrival of the train drew near, the scene became animated and exciting. For an hour and more the crowd had been gathering and gathering till from hundreds it had amounted to tens of thousands. Along the roads leading to the station entrance, and for fifty yards beyond, the people were lined up by the constables on duty. The volunteers arrived at their respective posts, and were formed up awaiting the arrival of the train. Every window of the terraces and villas was filled with spectators, and even on the roofs enthusiastic young ladies had risked a climb from skylights to perch themselves on the ridges of oriel windows. The station buildings had been tastefully decorated by Mr. P. Bain, stationmaster, and his staff. Over the entrance was displayed the Scottish Standard, while underneath, in old letters, was the word 'Welcome'." Bannerettes streamed along the front of the station buildings, the national emblems being strung here and there.

"At last, up to time, the train was sighted rounding the Ninewells curve, and a hum of excitement arose from the immense throng. Aa the engine and train steamed into the station a volley of fog signals welcomed the conquering heroes with a jubilant salute. Fifteen months ago, when the contingent left the West Station, a similar send-off salute was fired on the rails. Since then the brave fellows' ears had been familiarised with the roar of cannon and the rattle of musketry, so much so that the pop-guns on the metals were of no account in their estimation. Before the train drew up at the station the men in khaki were seen leaning out from the carriage windows. That was the signal for the outburst of cheering, which, with little intermission, was kept up like volley firing all the way to the Drill Hall. On the carriages being drawn up at the station the men left the compartments, and were drawn up in line on the platform. The civic dignitaries stepped forward and greeted the officers and men, shaking each warmly by the hand, and expressing hearty congratulations on their safe return home. Some of the female relatives of the gallant fellows had forced their way inside the station, and several of the men left the ranks to greet their friends and relatives. Some very touching scenes were thus witnessed. When the brave fellows emerged from the station they were greeted with deafening cheers accompanied with the waving of a cloud of white handkerchiefs. In response to that great ovation the khaki men waved their hats and bowed their acknowledgments." (*Dundee Courier,* Saturday 18th May 1901)

The Hastings Volunteers return home

The return to Hastings of the 1st Cinque Port Rifle Volunteers who had seen active service with the Royal Sussex Regiment, saw them leave the regimental headquarters at Chichester and detrain at St. Leonards West Marina station:

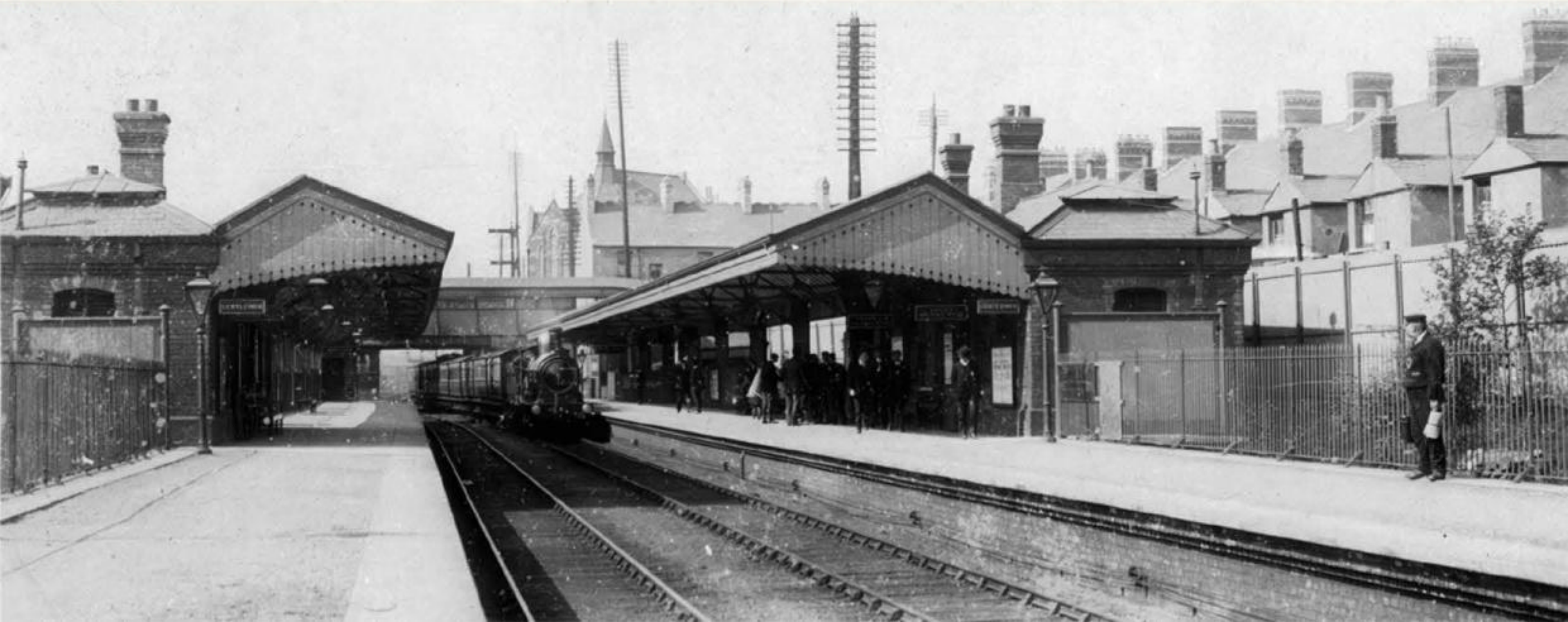
"The crowd at West Marina was a tremendous one. for it was here that the men whom all Hastings is proud to honour first set foot after their long absence, and the reception given them, as may be supposed, was hearty in the extreme. About half-past six o'clock the rain came down in a most determined manner, and what little shelter there was to be had soon became exhausted. Any attempt to enter the station proved futile, except by taking tickets to St. Leonards and Hastings, and while a few of the more knowing of the feverishly expectant throng availed themselves of this loophole from the wet, the rest bravely withstood the elements and faced a good drenching. The only others on the platform were the Mayor and Corporation, a few relatives, one or two officers of the Rifles, and some enthusiastic representatives of the Hastings Football Club, all anxious to get another glimpse of their redoubtable champion, Private Bannister, who, it is most interesting to know, has brought it back in his kit bag the football given him by his friends when he went away. Rain continued al intervals in no uncertain manner until the train drew up at the platform only a few minutes late, but these periods seemed almost interminable to those whose pleasurable expectation could hardly be kept within bounds.

"The time of waiting at last came to an end, and the eyes that had almost incessantly been turned to the west were rewarded by the appearance of the train. Most appropriately, several fog signals had been put on the rails, and from a loud and solitary bang the reports grew more numerous until, just as the engine approached the platform end, there was quite a volley of detonations. The men could not be seen until almost at the alighting point because of a curve in the line, but when they were once round it their bronzed faces could be detected leaning out of the windows, radiant with smiles, indicating their joy at being home once more. On their caps they had pinned small streamers of red, white, and blue, the colours they have all been so nobly upholding, with the Royal Sussex, on the veldt, and one of the more enthusiastic had possessed himself of a miniature Union Jack, which he waved with unceasing persistency. Although there were very few people on the platform, they did themselves justice by raising a hearty cheer, which the Volunteers lustily replied to. Hats were waved in the air, and the scene was one of the greatest enthusiasm. The train had no sooner stopped than the men, smartly clad in what appeared to be new suits of khaki, were stretching their legs and dumping their kit bags on the ground. They all looked the picture of health, and their well-knit frames showed that campaigning had brought their manly qualities to the surface. As soon as they had alighted the train which had brought them from Chichester moved off to Hastings, and the other passengers, who the meanwhile had been interested spectators of detraining, gave them another rousing cheer, which was, of course, fully appreciated. The next few minutes were spent in congratulations, the men receiving at the hands of several townsmen thanks for their arduous struggles in upholding the honour of the flag under which they are proud to serve, and the traditions of the ancient Cinque Port with which they have the privilege to be associated." (*Hastings Observer,* Saturday 15th June 1901)

The Glamorgan's homecoming at Roath

"After two years' campaigning in South Africa the Glamorgan Militia arrived in Cardiff this morning and received an enthusiastic and affectionate welcome home from the friends and relatives who were waiting at the Roath Railway Station. The departure of the battalion from Southampton, the journey home, and the reception at Cardiff will be found graphically described below. The transport *Lake Erie* went into dock at Southampton on Friday morning. The officers and men, numbering 631, debarked in the afternoon, and they entrained for Cardiff promptly at midnight, as arranged. Amid the wild cheering of waiting friends and relatives, the train laden with the returning Militia steamed into Roath Station at five o'clock this morning, punctually at the announced time. They met with a rousing reception. For, despite the early hour, a crowd of several thousand people gathered in the station precincts, and as the men left the train and formed up in quarter column to march to the barracks they were greeted with loud and continuous cheering.

"All night long people had waited for the arrival of the train. The houses in all the streets radiating away from the station were packed with strangers from every part of the county, who had come to give a welcome to their friends from the front. Beds for all of these were not to be thought of, and they had perforce to put up with the accommodation at their disposal.



Roath station, Cardiff, on the GWR South Wales main line, received the returning Glamorgan Militia with a vast crowd waiting outside. It had quite a short life, closing in 1917. (John Alsop Collection)

Many of the tenants of the houses reaped a rich harvest by charging sixpence for the use of chairs, and this their visitors were only too glad to pay. Many of them had been at the station on Friday morning in the expectation of seeing the men arrive then, and they had been wandering about the town during Friday until they were dead beat. In one house in Clifton-street there were nine members of a single family who had come down *en masse* from the Rhondda to give a greeting to one of the boys. From Merthyr, Dowlais, Aberdare, and even from the Mumbles, came the friends of the Militiamen.

"An engine driver from Maesteg was there to see his son home. On a certain morning more than two years ago the father went home to breakfast expecting to see his son as usual, but the lad was not there, and the fond father had not seen him since. Getting in with some adventurous companions, he had gone off and enlisted in the Militia, perhaps thinking that he would return to his home again in a few weeks. What the lad thought of foreign service might be imagined from a letter which he recently sent home, stating that the ship was not built which would take him abroad again. Many of the weary watchers failed to find a shelter anywhere. and remained outside in the streets all night. As the time wore on the crowd outside the station increased in density, and a surprising feature was the large number of females.

"As time advanced the crowd increased, until the outside of the station was thronged, and Clifton-street and the adjoining thoroughfares were thickly lined. A large staff of railway officials were on the spot, under Chief-Inspector Ward and Stationmaster Morris. A considerable force of police was also present, under charge of an inspector, and these kept a clear space outside the station entrance to give the troops room in which to form up. It was a very silent crowd while waiting. Most of the people seemed to be too tired for singing, laughing, or joking. and they kept very good order. At length, at 4.30, came intelligence that the troop special was at Newport. Seven minutes later the telegraph ticked out the news that the train had left Newport. The officials kept well in touch with the train and followed it along to the Ebbw Junction Box, and so on down the line. The approach of the train was heralded by the cheers of people far down the line, and it became apparent that all Roath was on the alert.

"On the platform to greet Colonel Perkins and his gallant men were Colonel Quirk. C.B., Major Lucas, Major Reed, Major Fowler, and Lieutenant Boyd, and a number of ladies. Other officers from the depot would have been present but for the fact that they were detained at the barracks on duty.

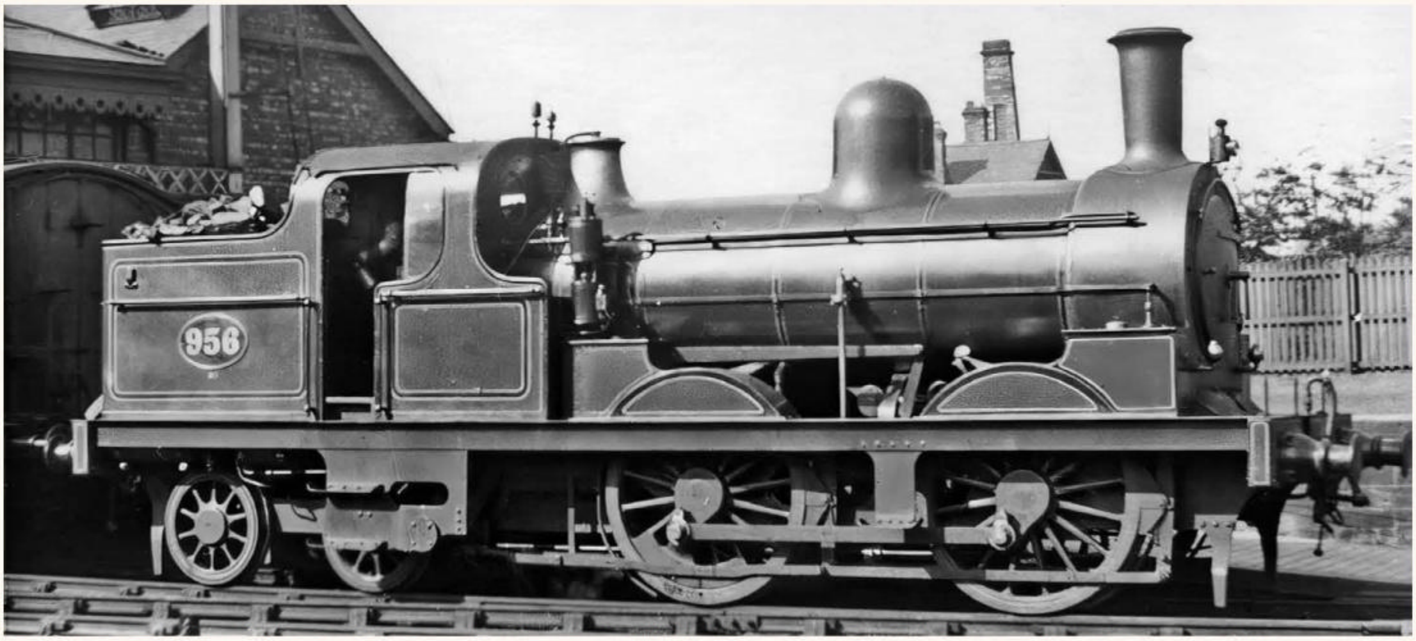
"On the arrival of the train Colonel Perkins was immediately buttonholed by one of our reporters, to whom he stated that the journey from Southampton had been devoid of incident. The men had passed the time away sleeping. One man had been left behind at Netley Hospital but. with this exception, the men were all well and fit. Beside the select few mentioned, no-one beside the railway officials themselves was admitted to the station, and the men thus were not impeded in detraining and getting their equipment into ship-shape order. This, however, took some time. Great coats had to be rolled up, kit bags put away, and a baggage guard of twenty men told off to see to the nineteen tons of luggage which arrived with the battalion. This, by the way, did not include any pianos or cooking ranges, but was chiefly made up of the officers and men's kit. Colonel Quirk stated to our reporter that he had no idea that there would be such an assemblage at the station, and the time of the arrival of the regiment was fixed for five o'clock, with the idea of avoiding anything in the way of a demonstration, it being the intention to reserve that until later in the day.

"The cheers given as the train steamed in by the small crowd who gathered on the platform were taken up with greater heartiness by the huge crowd outside, and everyone was speedily on the tip-toe of expectation. But the people were called upon to exercise a great amount of patience. An officer who made his appearance for a moment or so was lustily greeted, but almost immediately he vanished into the station again, and the doors were once more closed and fastened. The crowd beguiled the time by singing popular airs, by joking, and by good humouredly chaffing the wives and sweethearts who anxiously awaited the return of their loved ones. For half-an-hour perfect order was kept, and everything was in readiness for carrying out the preparations made by military and police. The square formed by the crowd had been kept intact, and there was plenty of room for the returning troopers to commence their march in quarter column.

"But patience became exhausted. 'Why don't they come?' 'What is the cause of the delay?' was heard on every hand, and the next moment the crowd broke through, and surged around the station doors. The police were utterly powerless to resist them, and for a time matters assumed an unpleasant aspect. At first men had given the best places to the women and children, and these were now severely crushed. In one place four or five policemen and a dozen civilians formed a cordon around three women (two of whom were awaiting their husbands) and children, and by this means saved them from injury. But others of the weaker sex were not so fortunate, and at least one woman and one child were knocked down and trampled on. At last, after a wait of three-quarters of an hour, an attempt was made to commence the march, but the appearance of the sun-burnt warriors was only a signal for more surging, and the doors were again closed. Then the police, by stating that the soldiers would not come out until there was a clear course, managed to obtain a lane, but the men, when they re-appeared, were immediately surrounded. Major Fowler, who went first, had to literally cut his way through the crowd, and it was not until Clifton-street was reached that the men were able to get into any kind of formation. Needless to say, they were tremendously cheered. and they received their C.I.V. greeting with the best of good humour. (*Evening Express,* Saturday 8th March 1902)

"After their five hours' run from Southampton, which had been continuous except for a few minutes' stoppage at Salisbury, the men seemed somewhat fatigued and worn, but warmed by the cordiality of the reception accorded them by those on the

The Durham Light Infantry arrived in two special trains at Barnard Castle station where North Eastern Railway BTP 0-4-4T No.956 is waiting. (John Alsop Collection)



platform they soon displayed gay spirits, and expressed the desire once more to be with their relatives and friends. Owing to the unusual length of the train, consisting as it did of 14 or 15 carriages, it was found impossible for all the men to detrain simultaneously, and before the members of A and B Companies could once again set foot on Welsh soil the train had to run forward some 20 or 30 yards. Orders were then issued to the men to put on their great coats, and having equipped themselves with rifles, pouches, straps, haversacks, and kit they drew up in file, and awaited instructions for their departure from the station. (*The Cardiff Times,* Saturday 15th March 1902)

The Third Battalion Durham Light Infantry returns to Barnard Castle

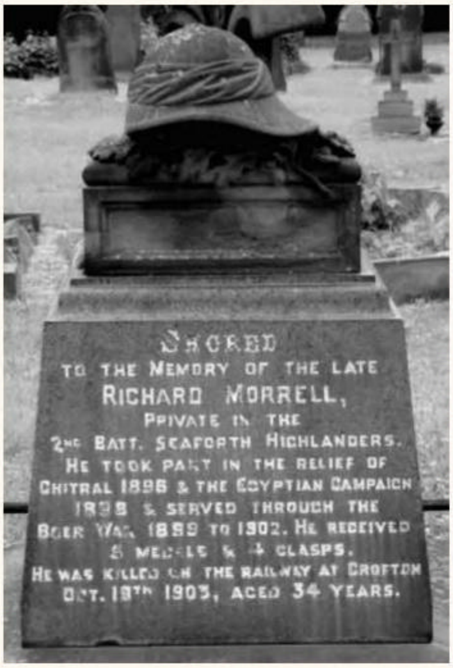
"The two special trains from Southampton, conveying the main body of the regiment, and due at Barnard Castle at 7.17am, were nearly an hour late. In consequence the ordinary morning trains were dispatched before the arrival of the military trains, and the near approach of the latter was heralded by a salvo of fog signals, and tremendous cheering by the assembled multitude. The scene was joyous, yet our exultations were mingled with the sorrowful regret that many of the brave men had been buried on the veldt.

"In all there were 345 men. No sooner had the soldiers stepped out of the train than it was seen that they were all the picture of health and vigour. Many very affecting scenes were witnessed and it was singularly touching to see the long-absent militiamen 'cuddling'and fondling their children, and embracing their wives, and even their mothers and, in the hurry and the bustle, none was more heartily welcomed home to his good wife and bairns than the popular Lieutenant Splaine, who comes of a family of soldiers, and who is himself every inch a soldier. Of course all the officers were warmly greeted, and so were the men.

"Take these into the booking-office for me" said Captain T. G. Sowerby to an orderly, and turning to a stone table in the station we beheld two 'Long Tom' shells, and, from a label attached, it was gathered that the shells had been surrendered by the Boers at Komati Poort, together with two 'pom pom' shells and some Krupp shells." *The pom-pom was a light artillery gun initially used only by the Boers, but later by the British too. (*The Teesdale Mercury,* Wednesday 19th June 1901)

Homeward bound

A number of soldiers who had been invalided home were travelling from London to Yorkshire, on Tuesday 15th May 1900, when a man of the West Yorkshire Regiment became unmanageable, raving in the belief that he was still fighting at Spion Kop. He was removed from the train at Peterborough station, taken to the local Infirmary and detained there.


SACRED
TO THE MEMORY OF THE LATE
RICHARD MORRELL,
PRIVATE IN THE
2ND BATT. SEAFORTH HIGHLANDERS.
HE TOOK PART IN THE RELIEF OF
CHITRAL 1896 & THE EGYPTIAN CAMPAIGN
1898 & SERVED THROUGH THE
BOER WAR, 1899 TO 1902. HE RECEIVED
5 MEDALS & 4 CLASPS.
HE WAS KILLED ON THE RAILWAY AT CROFTON
OCT. 19TH 1903, AGED 34 YEARS.

The grave in Knottingley Cemetery, West Yorkshire, of Private Richard Morrell, who served with the Seaforth Highlanders in South Africa. After his return to Yorkshire, he was employed by the Lancashire & Yorkshire Railway as a ballast man. He was killed while working at Crofton Junction, south east of Wakefield, when he was pitched out of a wagon, dying immediately. As a regular in the Army he had seen active service in Chitral (now in Pakistan) and Egypt. The memorial was raised by public subscription in April 1904. (Author)

"On Sunday evening an incident of a most exciting measure occurred at the Warwick Railway Station. A detachment of soldiers belonging to a Scottish regiment were travelling to Birmingham, when a stop was made at the county town for the collection of tickets. The men who were thoroughly enjoying themselves suddenly discovered that one of their number was missing. The man, it would appear, had been counting his money, when a sixpence fell from his hand and rolled under one of the coaches. The soldier made a dash for the coin, and when in this perilous position the train commenced to move. The man, with great presence of mind, threw himself at full length between the rails. His cries for help attracted the attention of some people on the platform; railway officials were made aware of the man's peril, and the train was brought to a standstill. The man was fortunate to escape from beneath the train so quickly, for if the latter had proceeded much further he would have come into contact with some horse boxes, and the result would probably have been fatal. The man escaped without the slightest injury and got the sixpence into the bargain." (*Leamington Spa Courier,* Friday 23rd May 1902)

"Lansdown Station [Cheltenham] was again alive on Saturday night and the greater part of Sunday with troops, regulars and volunteers, returning over the M. and S. W. J. [Midland & South Western Junction] and Midland Railways from service, active and otherwise. Between 9.18pm on Saturday and 12.54pm on Sunday nine trains brought through the 1st and 2nd North and 1st and 2nd East Lancashire Rifle Volunteers from camp on Salisbury Plain. And on Saturday night at 7.45 a special train arrived from Southampton, bringing 318 time-expired men for Worcester, Derby, and Dublin. At 3.20 on Sunday afternoon another special steamed in from Southampton with 100 men and three officers for Birr [in County Offaly, where the Leinster Regiment's barracks were], 19 men for Glasgow, and 42 for Preston. The men in both these trains were refreshed at Lansdown with Cheltenham commissariat comestibles, consisting of sandwiches, with cups of coffee. The traffic arrangements were successfully superintended by Mr. Ward, stationmaster, and Foremen Day and Hamblin." (*Cheltenham Chronicle*, Saturday 23rd August 1902)

"The 'war fever' is over, and the public mind has returned to its normal condition of phlegmatic indifference. There was a time, not so very long ago, when the return from South Africa of a hundred 'men in khaki' would have convulsed the city of Exeter in a paroxysm of enthusiasm; the streets would have been decorated with a lavishness that bordered on wastefulness; and everybody who was anybody would have been at the railway station to bid the troops a hearty welcome home. That time, alas! seems to have entirely departed. Yesterday, when about a hundred Militia Reservists of the Devonshire Regiment, Welsh Fusiliers, Royal Fusiliers, and Northumberland Regiment, arrived at Queen-street Station from Southampton, they were accorded a very lukewarm reception. There was absolutely no attempt at anything approaching an organised welcome, and little evidence was given that the Ever Faithful City was glad that these sunburnt and warstained 'Tommies' had returned safely from the storm-swept veldts and kopjes of South Africa to the peaceful surroundings of an ancient city. The train containing the men – who were in charge of Captain Osborne – was due to reach Queen-street at 1.31, but it did not steam in until a quarter of an hour later. Then, all the greeting they received was conveyed in a few hearty cheers from a handful of people, many of them relatives of the Reservists, who had assembled on the platform. The soldiers returned the cheers with gusto, and did not, in their joy at being home once more, seem to notice the smallness of the crowd or the absence of a formal welcome." (*The Western Times,* Saturday 30th August 1902)

In August 1902 three soldiers were acquitted of throwing a fourth out of a moving train near Woking. All four were returning from South Africa. It was alleged that they were fighting over a bottle of whisky.

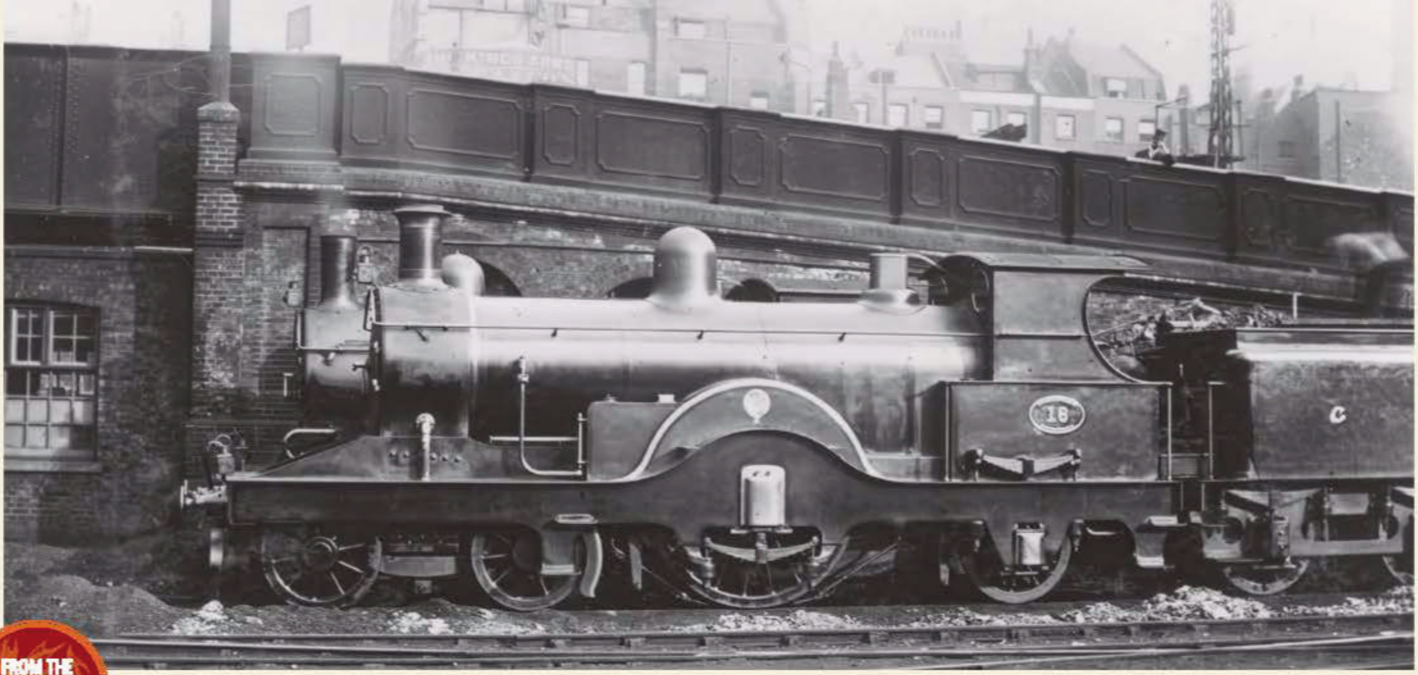
Cinematograph recordings

"The cinematograph was employed to record the incidents and movements of the crowd [at the departure of Reservists from Paragon Station, Hull]. Mr. W. Barry, photographer, secured a cinematograph film of the train as it passed over the Anlaby-road crossing. Several of the men were waving their handkerchiefs as an adieu to their friends there congregated, and the scene was a most animated one." (*Hull Daily Mail,* Monday 16th October 1899)

"Messrs. Walker and Company have obtained splendid cinematograms of the volunteers as they passed along the railway bridge. This fine view was obtained from a window in Combe's Central Hotel." (*Aberdeen Journal,* 1st May 1901)

Do either of these recordings survive? A very short piece of film of one of the decorated engines that took the returning City Imperial Volunteers to London can be seen online.

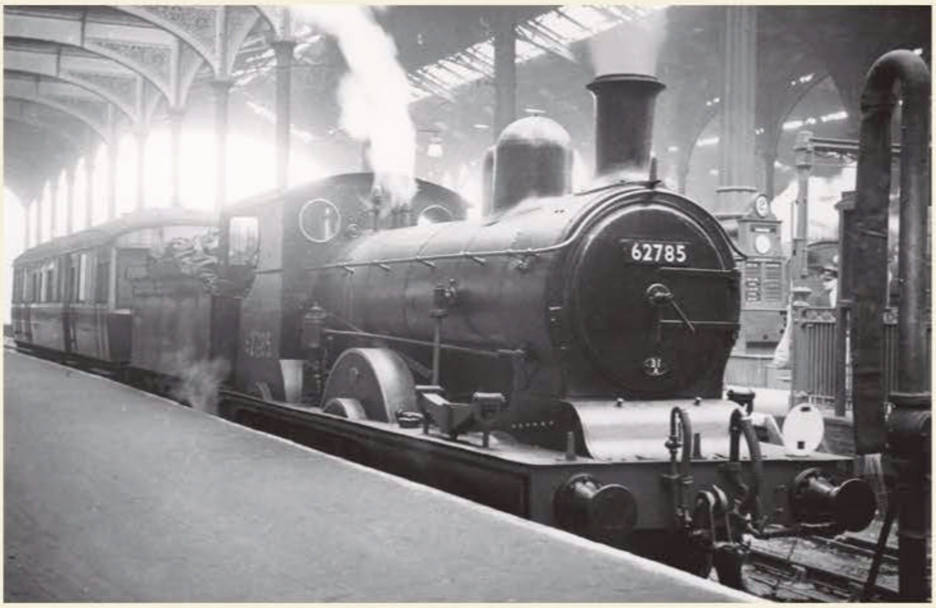
(to be concluded)



FROM THE PENDRAGON ARCHIVES

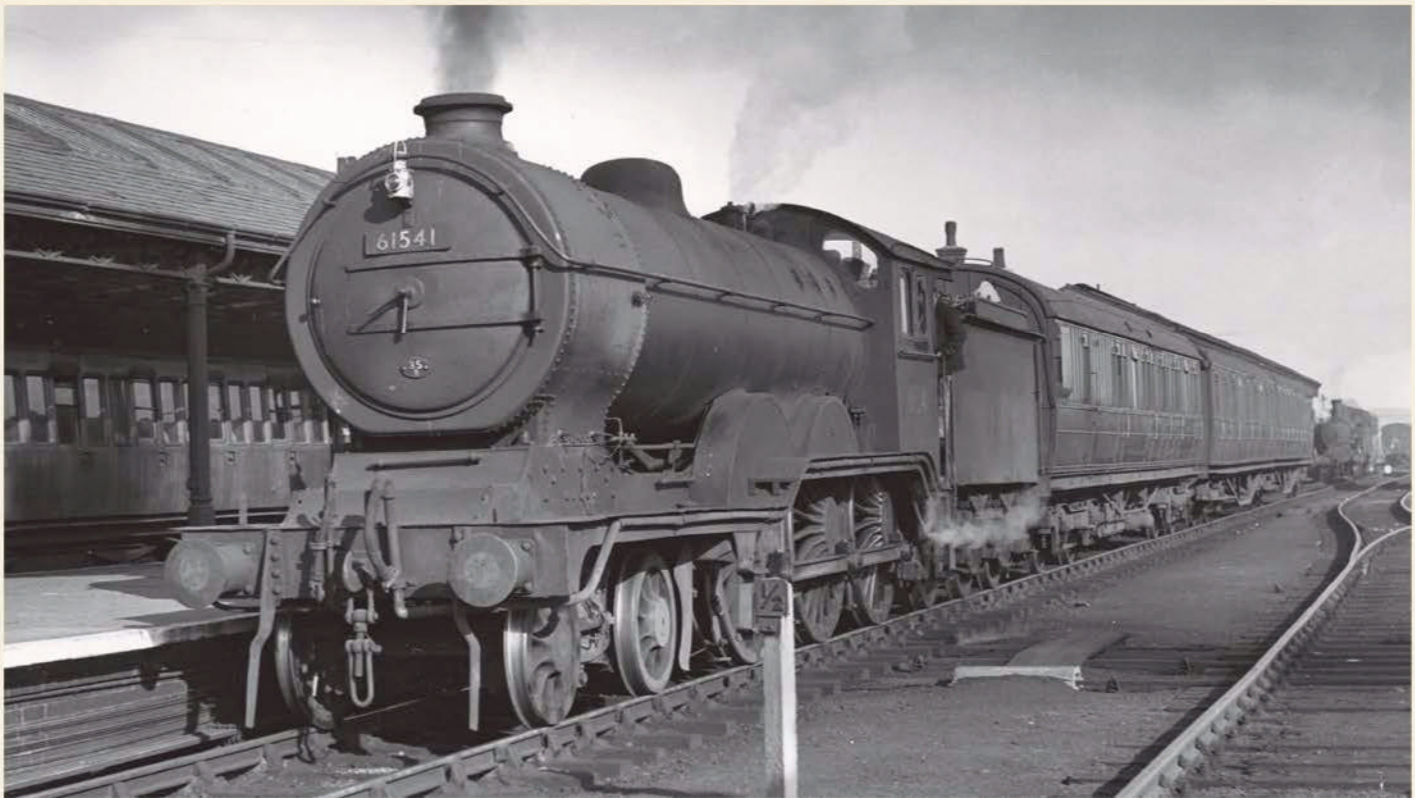
SOME GREAT EASTERN GEMS

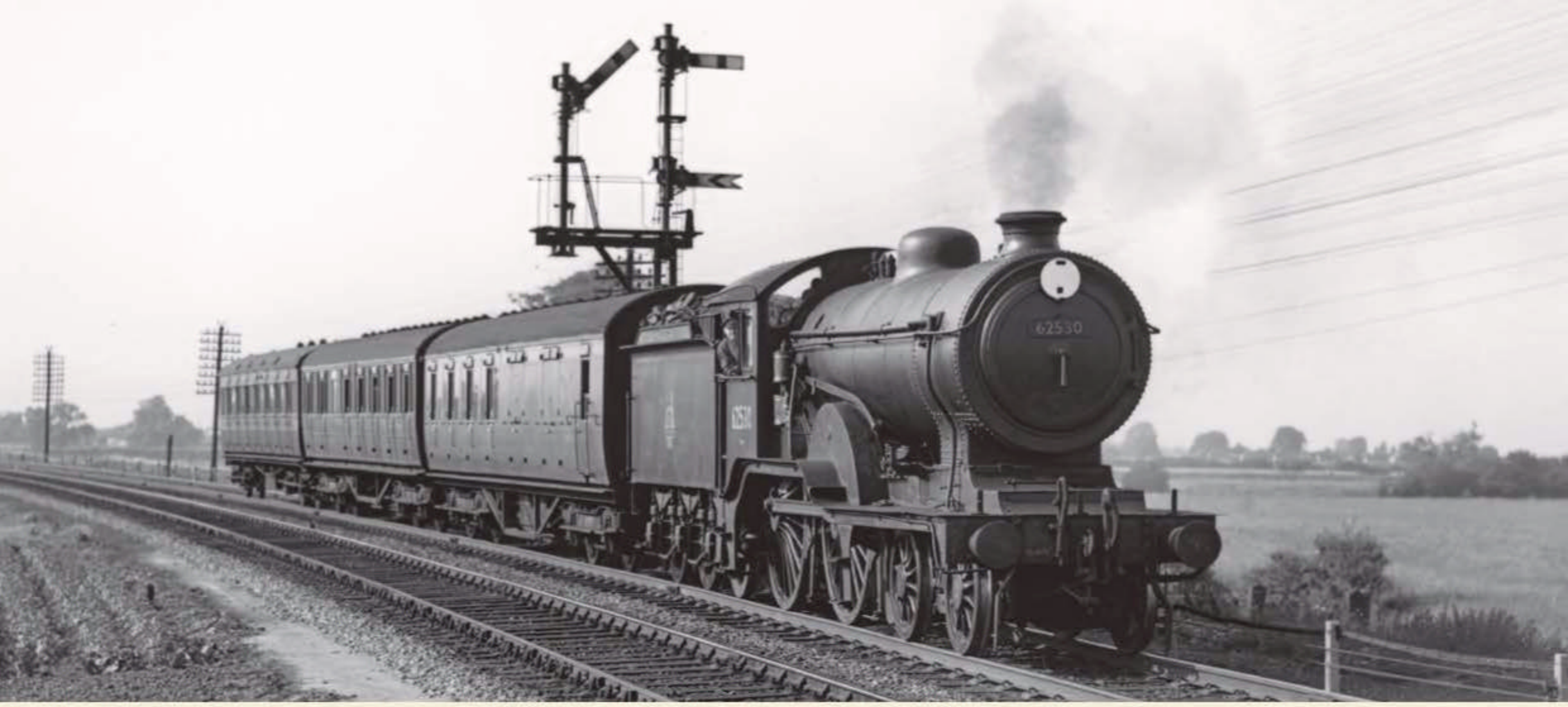
ABOVE: **Seen outside Liverpool Street station is Great Eastern Railway 4-2-2 No.16, one of ten Class P43 singles built in 1898 with oil-burning apparatus. They were intended for working expresses from London to Cromer and Sheringham, but proved unsuited to heavier trains and all had gone by 1910.**



LEFT: **Class T26 – LNER Class E4 – 2-4-0s appeared in 1891 for mixed traffic purposes on rural cross-country lines. It proved a long-lived design, the last survivor being No.62785 which was not withdrawn until December 1959. In this late view it has ventured up to London with what looks like a saloon of some sort and fizzles gently at Liverpool Street.**

BELOW: **B12 4-6-0 No.61541 leaves Grantham with a Nottingham local in 1949. Dating from 1911, the design was successfully crafted to achieve a powerful new express locomotive within the GER's axle loading limits. In LNER days improvements to the permanent way enabled a rebuilding of the B12s to increase their weight and power, in which form No.61541 is seen. It was one of a batch built by W. Beardmore & Co. in Glasgow and was withdrawn in 1957.** (Eric Treacy)

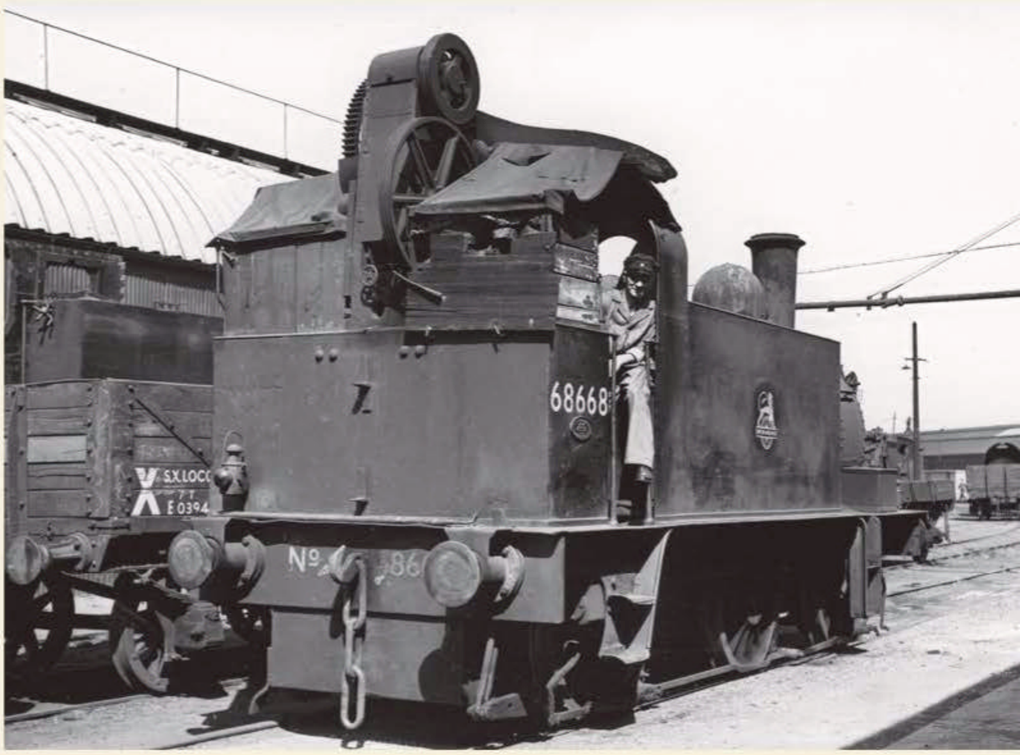


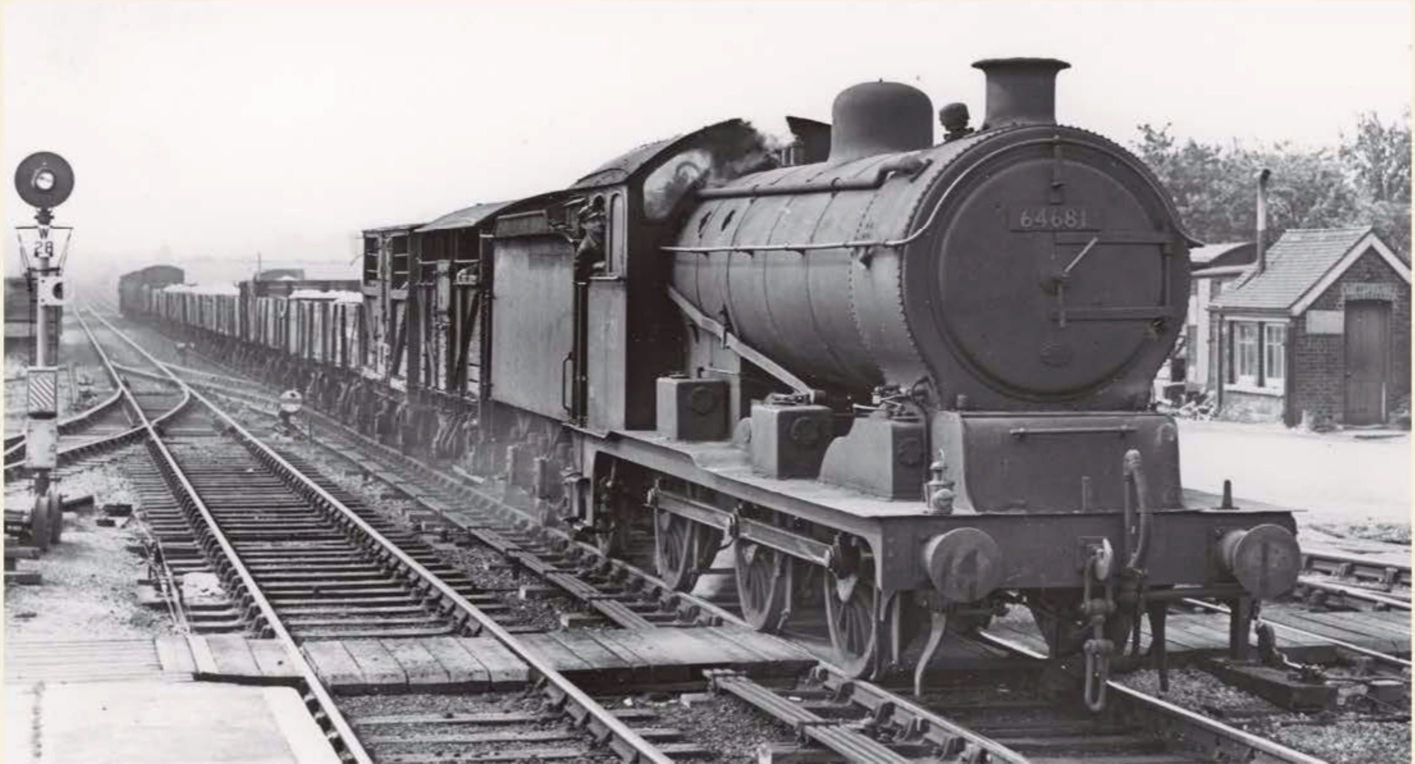


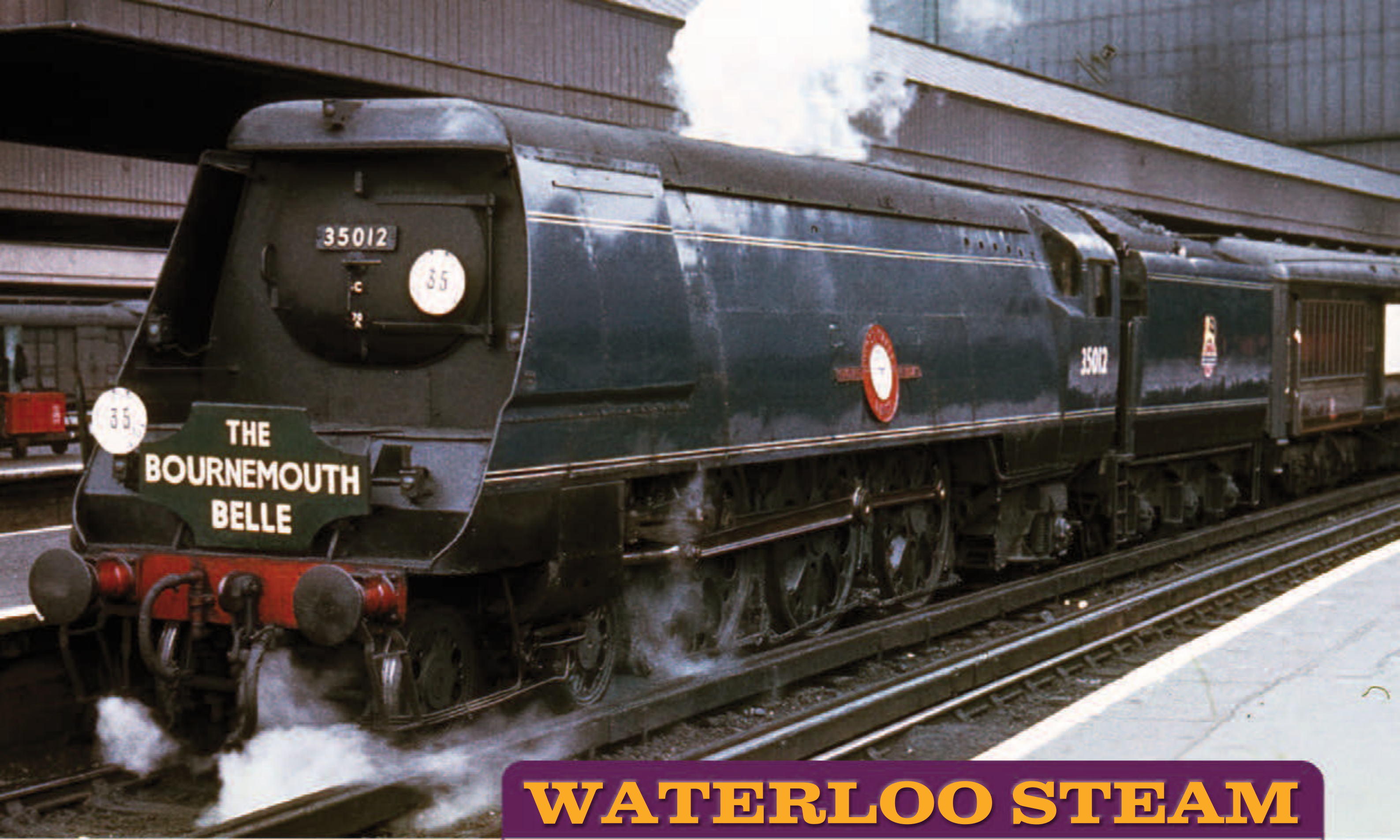
ABOVE: **A much respected GER express design was a 4-4-0 which first appeared in 1900 and became known as the 'Claud Hamilton' Class (he being chairman of the company). Undergoing various rebuildings and with ten more constructed after the grouping, they eventually totalled 100 engines encompassing LNER Classes D14, D15 and D16. Photographed near March with a St. Ives train in 1952 is D16/3 No.62530 (LNER rebuild with round-top boiler).**

RIGHT: **A rarely-seen oddity was J92 0-6-0 crane tank No.68668. There were three of them (from a class of five going back to 1868) which were converted to crane tanks in 1891/3; the other two were scrapped back in 1888 and '92. They were employed around Stratford Works and the last was not withdrawn until 1952.**

BELOW: **The J20 Class was the last of the GER's 0-6-0 goods locomotives, built 1920-2 in anticipation of an increase in heavy freight traffic. No.64681 is approaching Wickford station on the Southend line.**





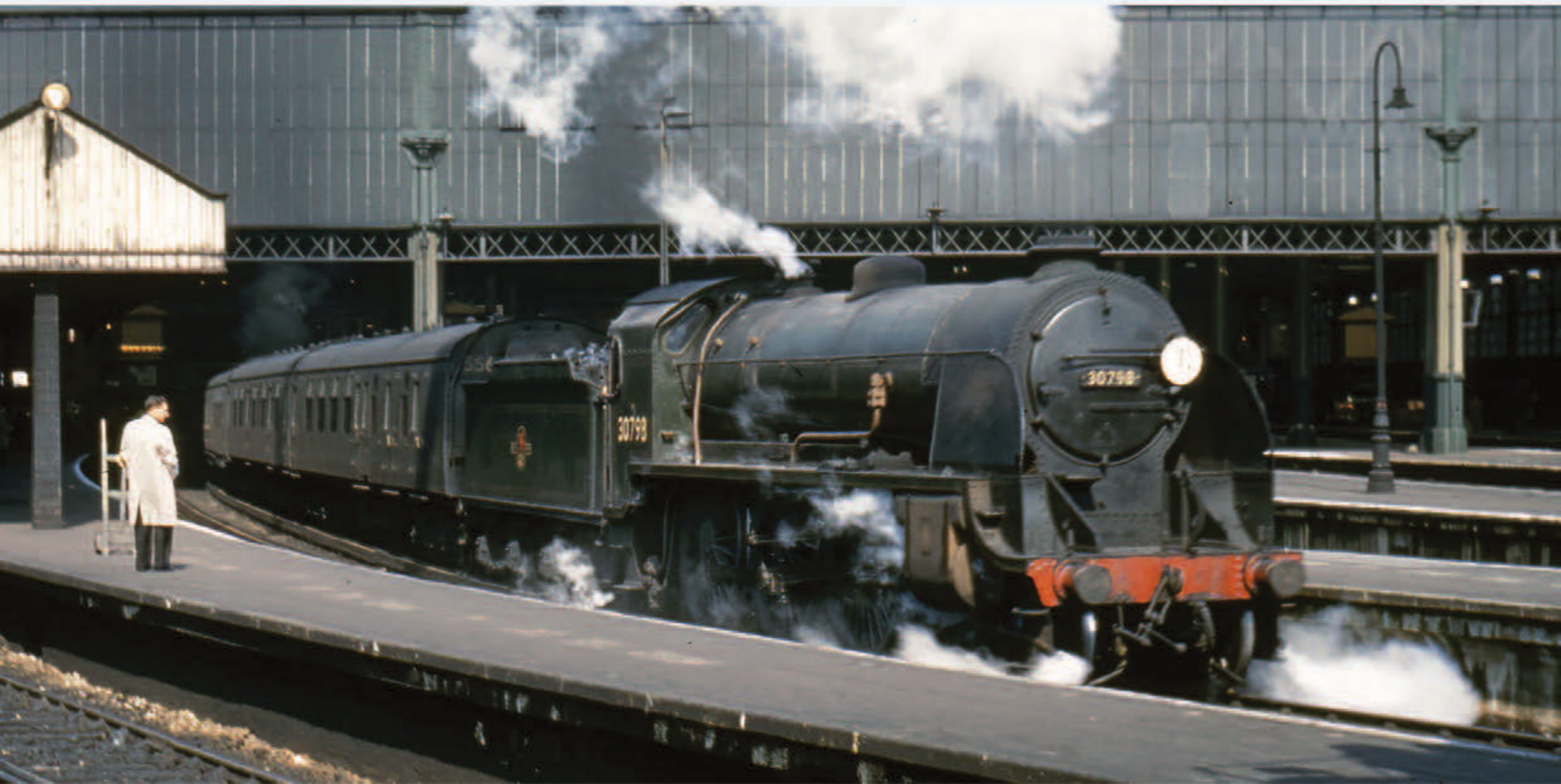


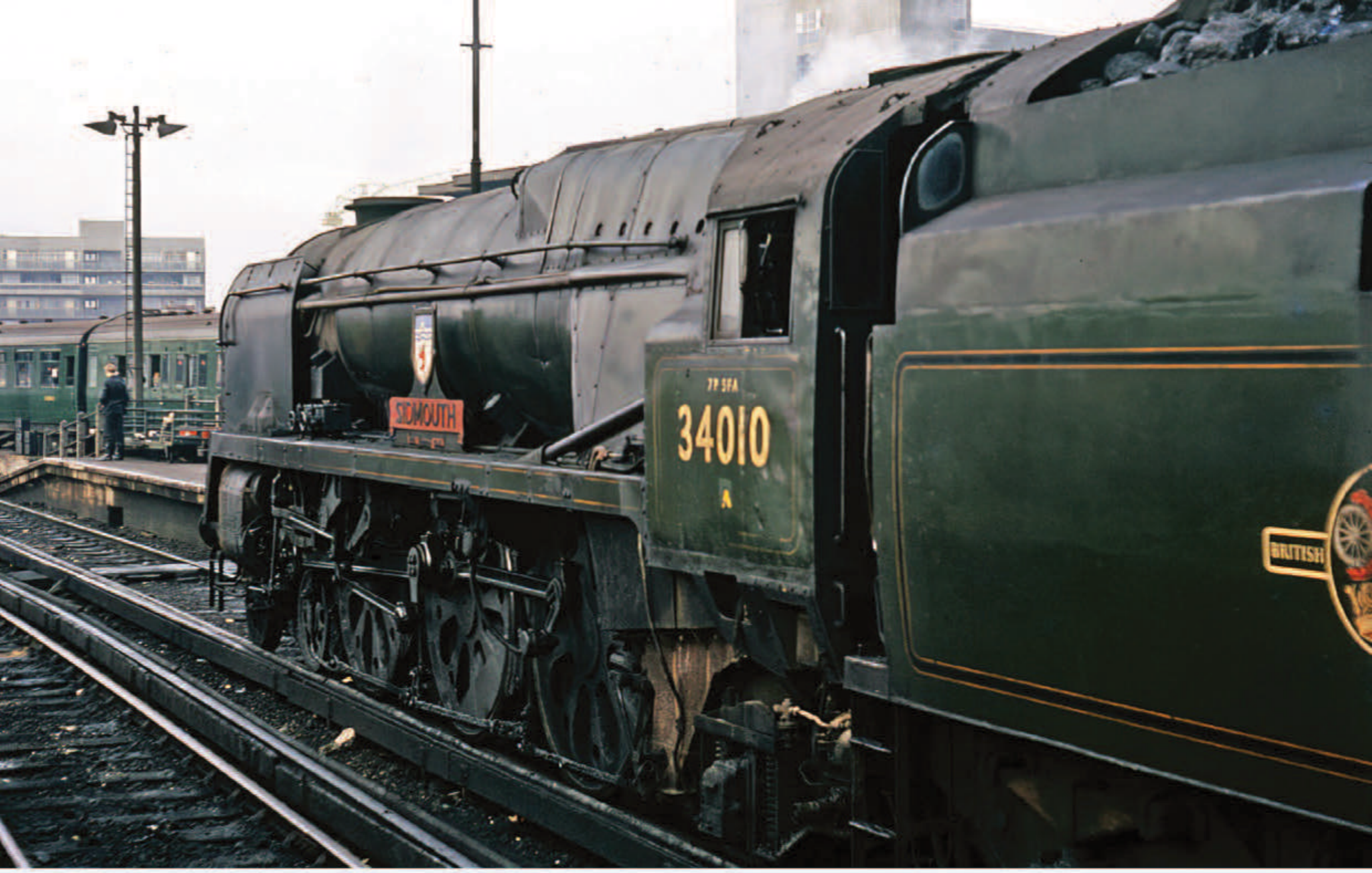
WATERLOO STEAM

We have looked at the spacious concourse of the London & South Western Railway's rebuilt Waterloo station recently, so now we turn our attention to the platforms themselves – and there were 21 of them to accommodate the main line and suburban services. Main line trains ran to Southampton and Bournemouth as well as to Exeter and beyond, while Waterloo became the last London terminus to see regular steam working until the Bournemouth line electrification in July 1967.

ABOVE: **Probably the most prestigious train to be seen at Waterloo was the 'Bournemouth Belle' Pullman leaving London at 12.30pm and Bournemouth West at 4.34pm, stopping only at Southampton. This photograph from June 1951 found it awaiting departure behind Southern Railway 'Merchant Navy' Pacific No.35012 *United States Line* in the original 'air-smoothed' casing and the early blue livery adopted by British Railways for principal express locomotives. This wasn't really a good match with Pullman car colours and did not wear well in service; the change to Brunswick green was enforced in 1951 and No.35012 was repainted the next year. It was rebuilt into more 'conventional' form in 1957.**
(Pursey C. Shortt/Colour-Rail.com BRS874)

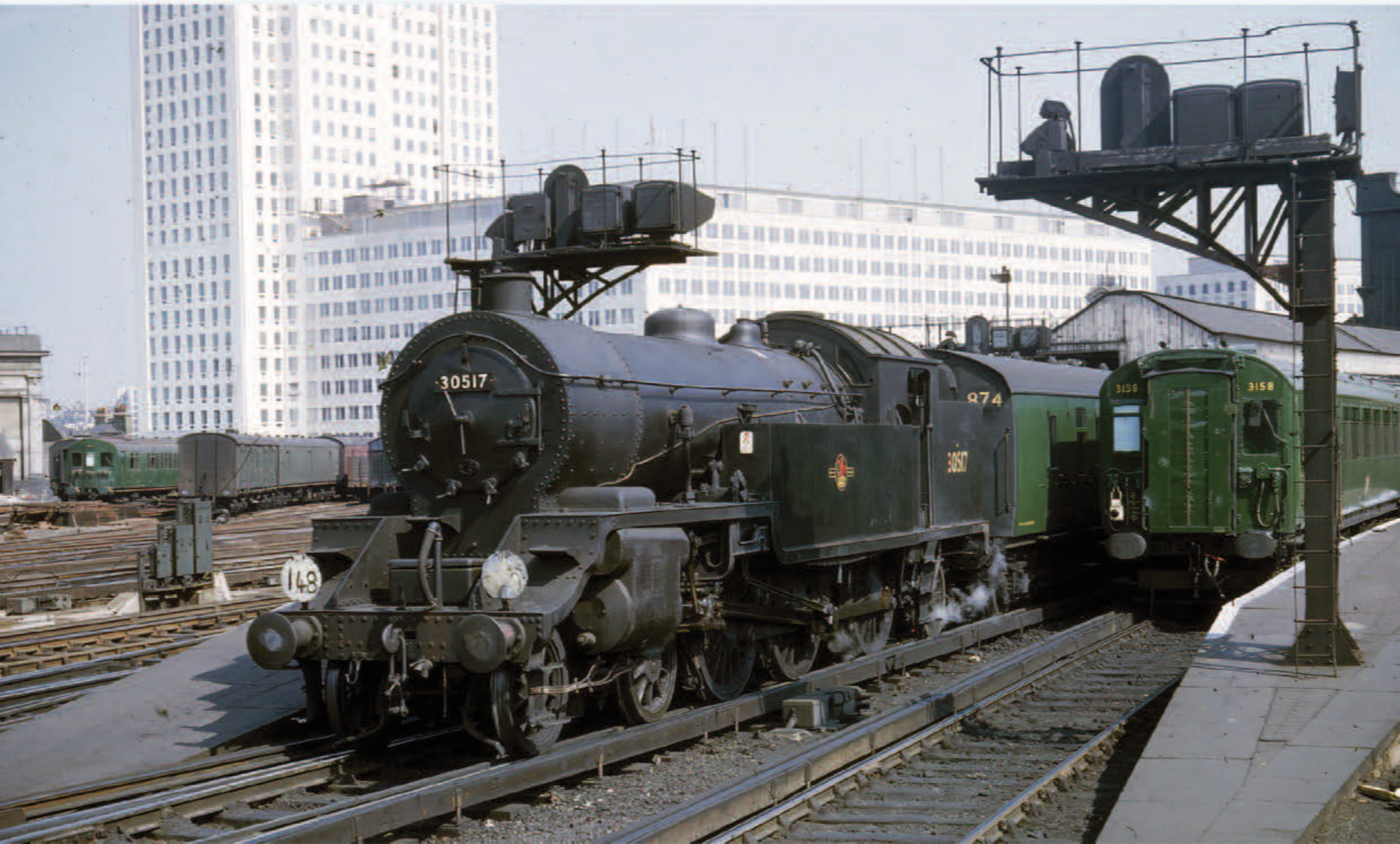
BELOW: **An earlier form of Southern express power was the 'King Arthur' Class 4-6-0, a design originated by the London & South Western Railway under R. W. Urie in 1918. Here we find No.30798 *Sir Hectimere* departing for Southampton Terminus in April 1962, observed closely by a man in a white raincoat. R. E. L. Maunsell added to the LSWR engines with 54 to an improved design between 1925 and 1927, with No.30798 being one of 30 built by the North British Locomotive Co. in Glasgow – often known as the 'Scotch Arthurs'. It was withdrawn two months later and all the 'Arthurs' had gone by the end of the year.**
(Chris Gammell/Colour-Rail.com BRS1695)

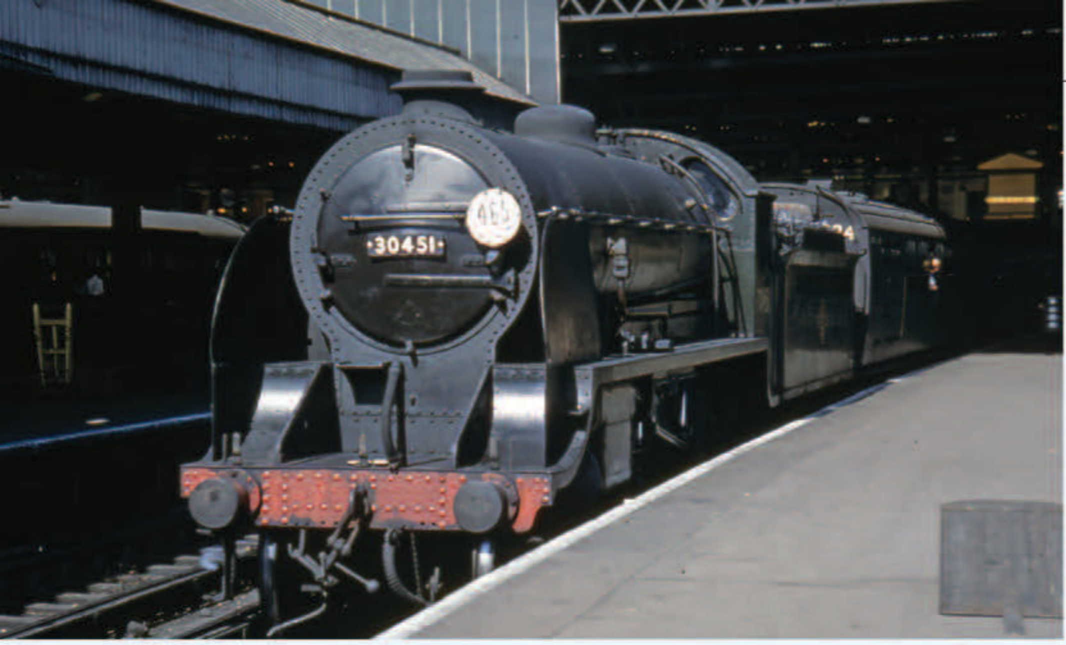




ABOVE: **A classic platform-end view of a Bulleid Pacific fully coaled and ready to go. In this view motive power is being provided by rebuilt 'West Country' No.34010 *Sidmouth*. Unfortunately we have no details of destination or date but *Sidmouth* was at Nine Elms depot from 1951 to August 1964, then at Eastleigh for its final year.** (G. Pratt/Colour-Rail.com 325051)

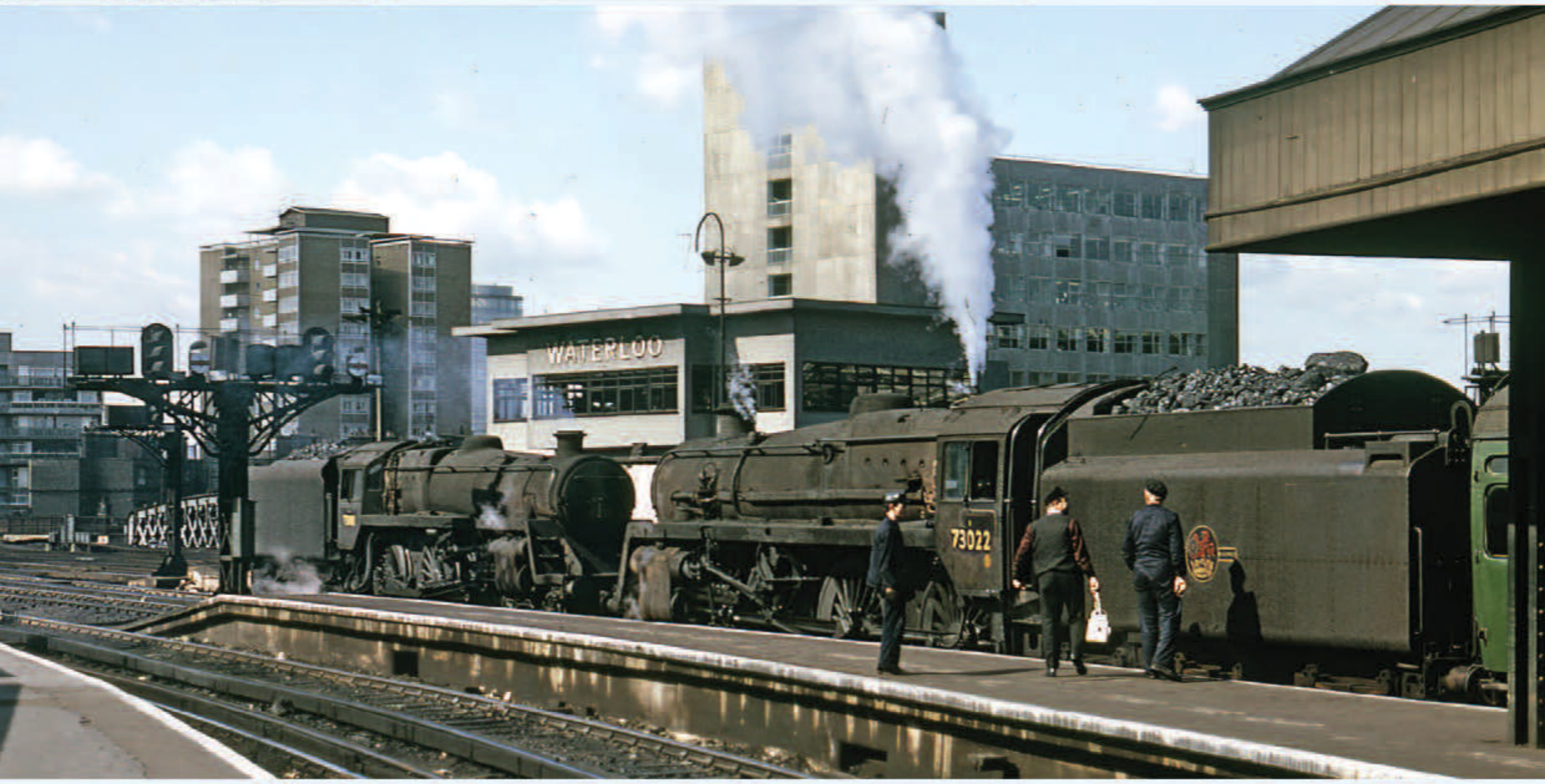
BELOW: **The other end of the motive power heirarchy is provided by LSWR H16 4-6-2T No.30517 about to move empty carriages out of the station on 8th July 1962. Five of these tanks were built in 1921/2, mainly for transferring goods traffic between Feltham and other yards in the London area. Later in their careers in BR days they could be found on empty stock workings between Waterloo and Clapham Junction. SR electric units were also in abundance at Waterloo – No.3158 is a 4-COR set. The architectural behemoth in the background is the Shell Centre then just coming to completion on part of the Festival of Britain site – 7½ acres as the offices of the Royal Dutch/Shell Group and part of London County Council's development of the south bank of the Thames. Sixty years have toned it down a bit...** (A. J. Clarke/Colour-Rail.com 315919)



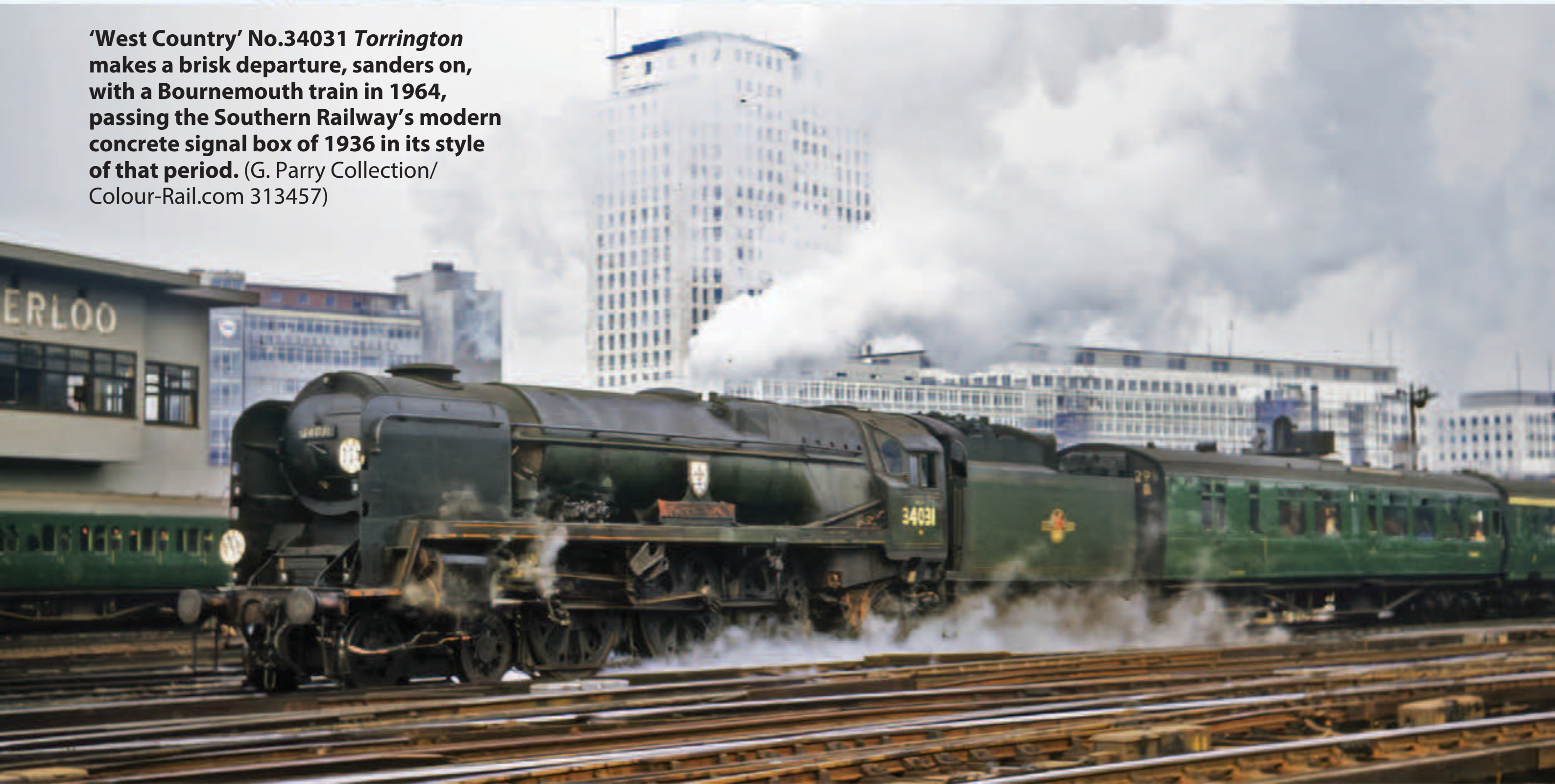


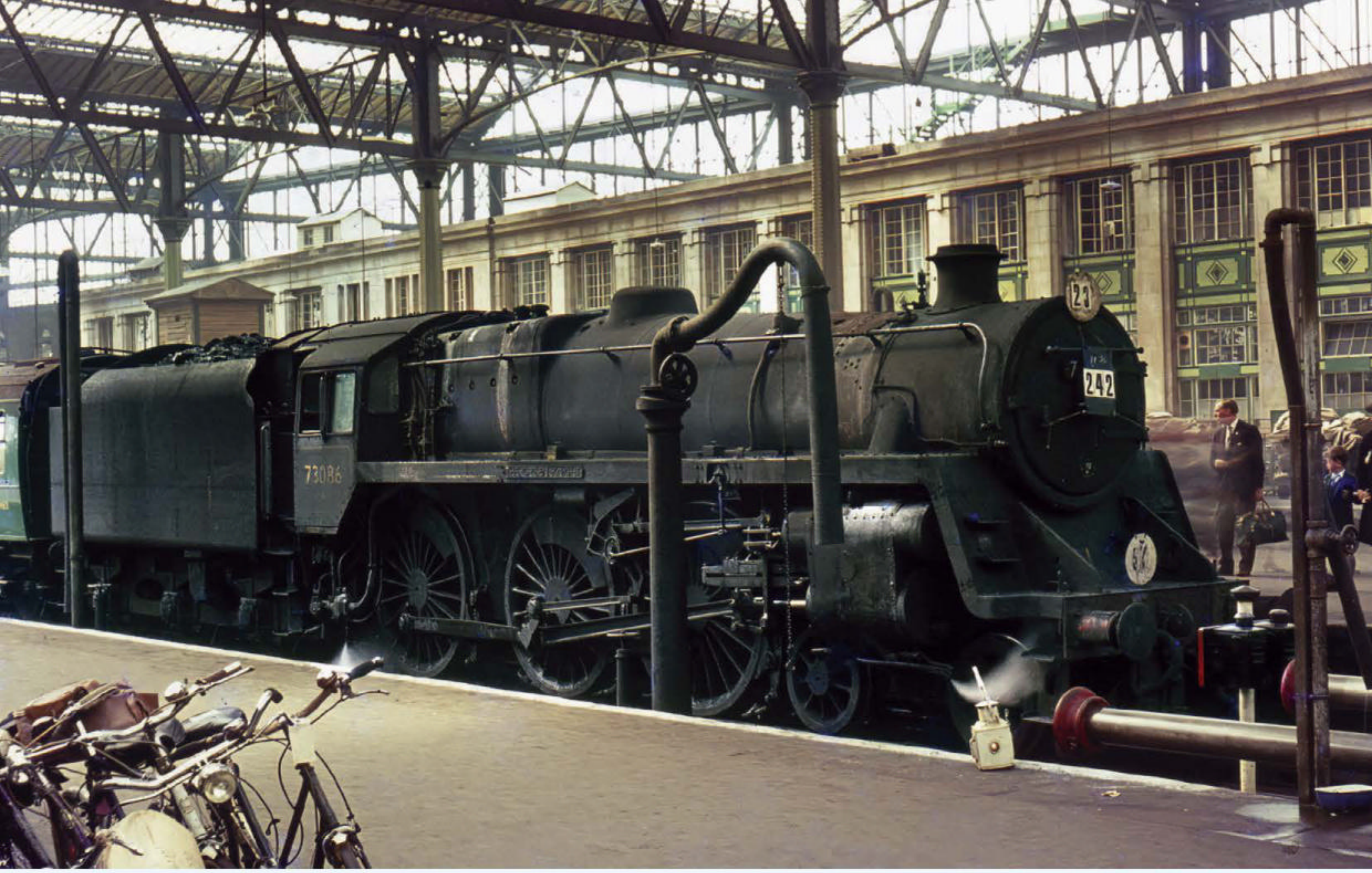
LEFT: **While Waterloo was light and bright as London termini go, it could nevertheless be as shadowy under the trainshed as any in the steam era. The outside sunshine picks on 'King Arthur' No.30451 *Sir Lamorak,* one of the first batch of the Southern Railway N15s built under Maunsell at Eastleigh in 1925, bound for Southampton in August 1961.** (Colour-Rail.com BRS1693)

BELOW: **BR Standard locomotives classes made their presence known at Waterloo from the 1950s and the SR had quite an allocation of the Class 5 4-6-0s. On 14th July 1966 Nos.73022 and 73118 were at the platform end.** (Colour-Rail.com 381283)



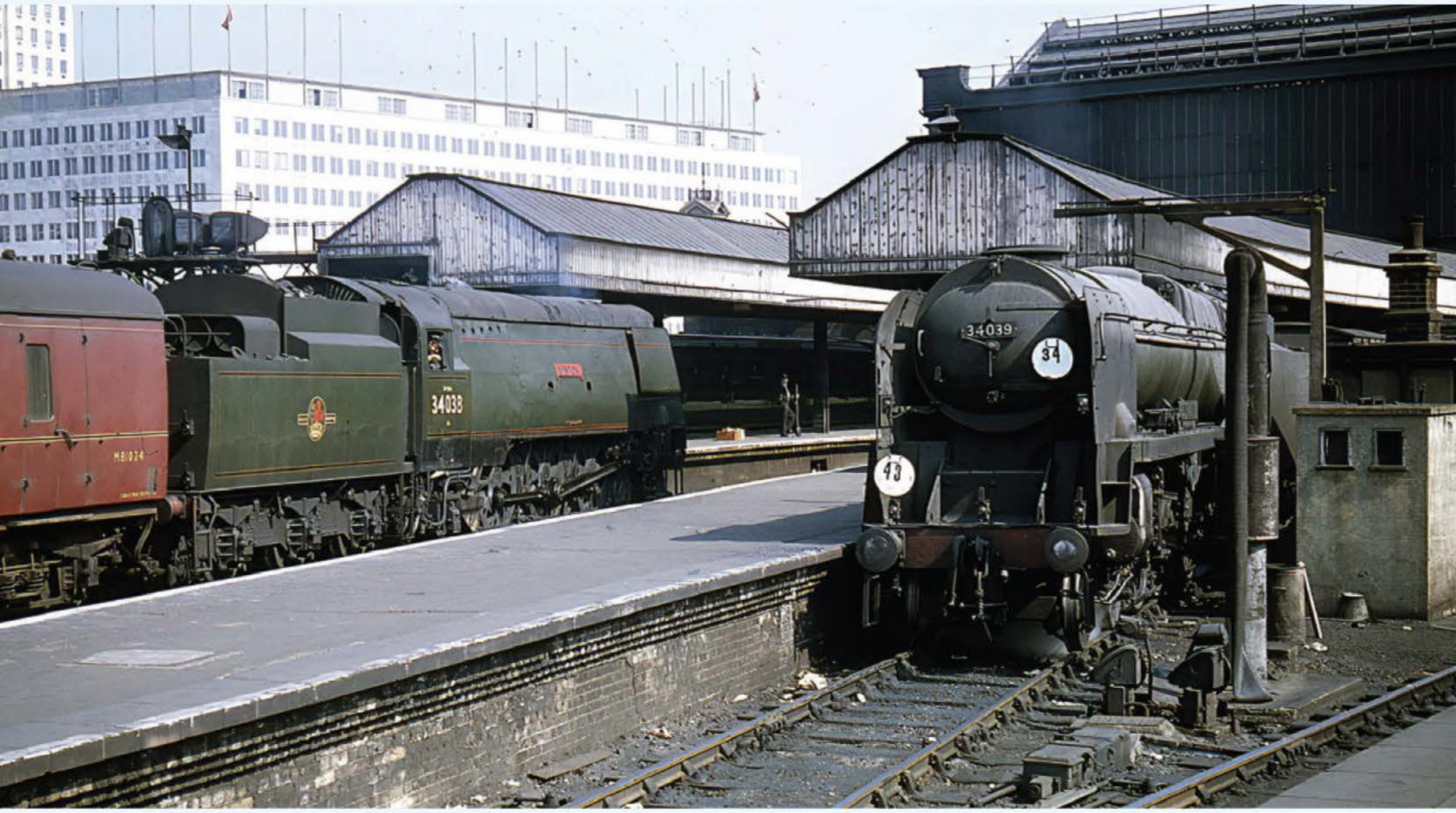
'West Country' No.34031 *Torrington* makes a brisk departure, sanders on, with a Bournemouth train in 1964, passing the Southern Railway's modern concrete signal box of 1936 in its style of that period. (G. Parry Collection/ Colour-Rail.com 313457)





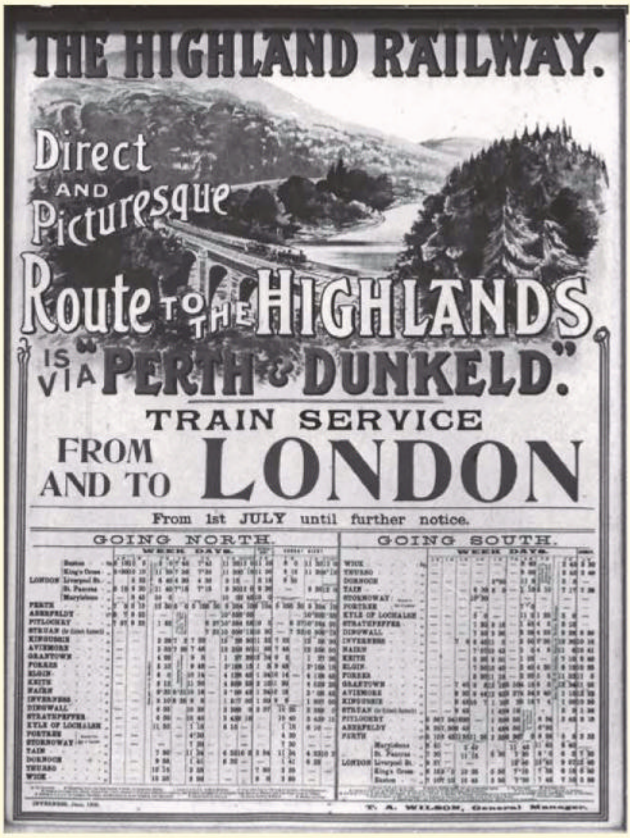
ABOVE: **BR Class 5 4-6-0 No.73086 has come to a stand at the hydraulic buffer stops where the provision for replenishing the water tanks of steam locomotives was plentiful. Despite its outward neglect at Nine Elms shed, we can see that No.73086 is one of the SR's Standard Class 5s to be given names from 1959, those being from withdrawn 'King Arthur' engines. No.73086 was awarded the name *The Green Knight* formerly carried by No.30754.** (P. R. Binks/Colour-Rail.com326863)

BELOW: **Bulleid Pacifics of both versions in this scene from 8th July 1962. Unrebuilt 'West Country' No.34038 *Lynton* runs into the station with a London Midland Region maroon coach at the front of its train and passes the next in the numbering sequence No.34039 *Boscastle* which had undergone the rebuilding process in 1959. *Lynton* was withdrawn in original condition in 1966 and scrapped; *Boscastle* went a year earlier but was to be one of several subsequently rescued from the Barry scrapyard and resuscitated by the preservation movement.**
(A. J. Clarke/Colour-Rail.com 325916)



LMS TOURIST TRAF

BY PETER TATLOW President of the LMS Society


THE HIGHLAND RAILWAY.
Direct AND Picturesque
Route TO THE HIGHLANDS
IS VIA "PERTH & DUNKELD."
TRAIN SERVICE
FROM AND TO LONDON
From 1st JULY until further notice.
GOING NORTH.
GOING SOUTH.
WEEK DAYS.
T. A. WILSON, General Manager.

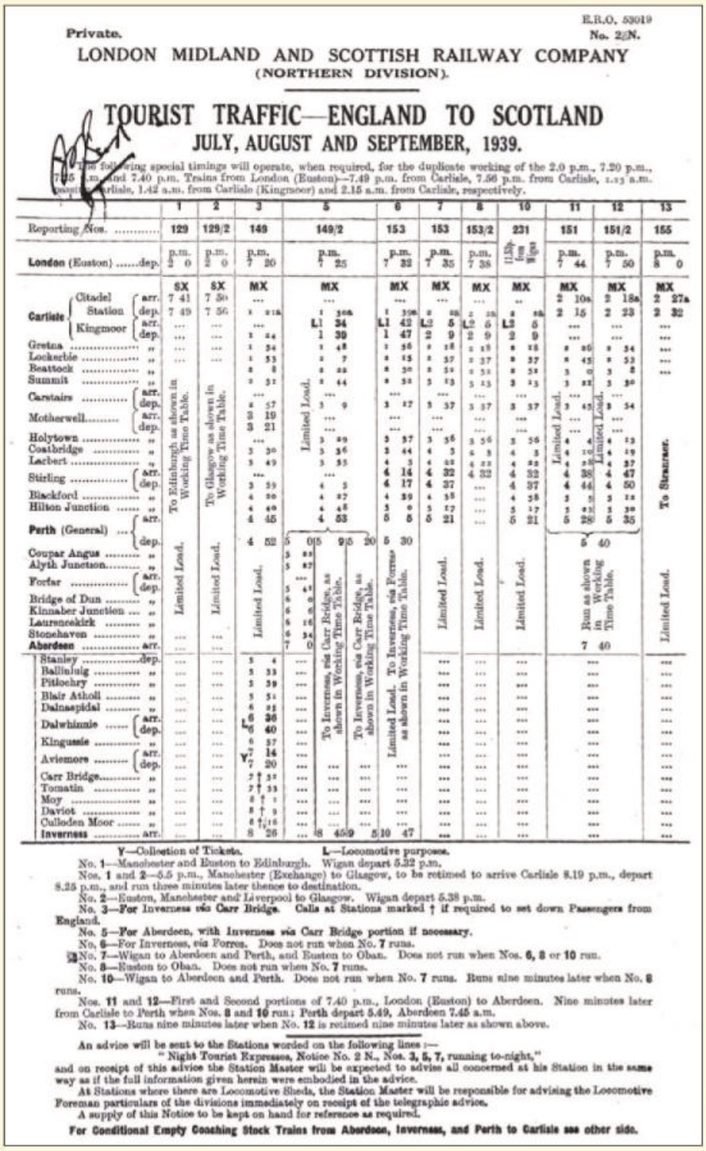
A billboard of 1905 advertising the Highland Railway's train services from five London termini to the picturesque Highlands of Scotland. (Highland Railway, Author's Collection)

Following Queen Victoria's infatuation with the Highlands of Scotland and hers and Prince Albert's acquisition of Balmoral Castle in 1852, increasing numbers of the upper classes had followed her north each summer to partake in shooting grouse on the moors from 12th August each year. Parties drawn from the upper echelons of society, accompanied by their guns, dogs and fishing rods heading for the sporting estates of the Highlands, Western Isles and South West Scotland, would travel north in time for the opening of the season on 'Glorious twelfth of August'.[1] As this business grew, the railways were faced with the prospect of conveying ever-increasing parties of the gentry, their servants and impedimenta in appropriate style.

There was considerable competition between the East, West Coast and Midland routes to provide for this lucrative business, culminating in the races to Edinburgh in 1888 and to Aberdeen in 1895, the outcome of which was that the London & North Western Railway/Caledonian Railway route dominated.[2] In time, this called upon a high proportion of sleeping and to a lesser extent dining cars.[3] At about 40 tons each, the accumulated weight of such heavy vehicles meant that, with eleven or twelve passengers per car, only about 150 passengers could be accommodated in each train. At its peak, this called for up to seven trains required each night. The availability of the attached railway Special Notice dealing with arrangements for handling this surge in traffic on the West Coast route of the LMS in the summer of 1939 and associated contemporary documents has prompted this article.[4]

Shown is an LMS Northern Division special traffic notice. The circular sets out how the regular year-round basic schedule of early evening trains from Euston for Scotland, all Limited Load, was expanded to cope with increasing traffic by duplicating trains. These are shown by suffixes added to the Reporting Number at the head of the table, *viz:* 129 and 129/2, 149 and 149/2 etc. Further details of the

An LMS Northern Division Special traffic notice for tourist traffic – England to Scotland for July to September 1939 printed on both sides of a single sheet. (LMS, Author's Collection)



E.R.O. 53019
No. 2N.

Private.

LONDON MIDLAND AND SCOTTISH RAILWAY COMPANY
(NORTHERN DIVISION).

TOURIST TRAFFIC—ENGLAND TO SCOTLAND
JULY, AUGUST AND SEPTEMBER, 1939.

The following special timings will operate, when required, for the duplicate working of the 2.0 p.m., 7.20 p.m., 7.25 p.m. and 7.40 p.m. Trains from London (Euston)—7.49 p.m. from Carlisle, 7.56 p.m. from Carlisle, 1.25 a.m. passing Carlisle, 1.42 a.m. from Carlisle (Kingmoor) and 2.15 a.m. from Carlisle, respectively.

	1	2	3	5	6	7	8	10	11	12	13
Reporting Nos.	129	129/2	149	149/2	153	153	153/2	231	151	151/2	155
London (Euston) dep.	p.m. 2 0	p.m. 2 0	p.m. 7 20	p.m. 7 25	p.m. 7 32	p.m. 7 35	p.m. 7 38	11.5p. from Wigan	p.m. 7 44	p.m. 7 50	p.m. 8 0
	SX	SX	MX	MX	MX	MX	MX	MX	MX	MX	MX
Carlisle Citadel Station arr.	7 41	7 50	...	...	...	...	...	...	2 10a	2 18a	2 27a
Carlisle Citadel Station dep.	7 49	7 56	1 21a	1 30a	1 39a	2 2a	2 2a	2 2a	2 15	2 23	2 32
Carlisle Kingmoor arr.	...	...	...	L1 34	L1 42	L2 5	L2 5	L2 5	...	...	...
Carlisle Kingmoor dep.	...	...	1 24	1 39	1 47	2 9	2 9	2 9	...	...	...
Gretna	...	...	1 34	1 48	1 56	2 18	2 18	2 18	2 26	2 34	...
Lockerbie	...	...	1 53	2 7	2 15	2 37	2 37	2 37	2 45	2 53	...
Beattock			2 8	2 22	2 30	2 52	2 52	2 52	3 0	3 8	...
Summit	To Edinburgh as shown in Working Time Table.	To Glasgow as shown in Working Time Table.	2 31	2 44	2 52	3 13	3 13	3 13	3 22	3 30	
Carstairs arr.			...	Limited Load. ...	...	...	...	...	Limited Load. ...	Limited Load. ...	
Carstairs dep.			2 57	3 9	3 17	3 37	3 37	3 37	3 45	3 54	
Motherwell arr.			3 19	...	...	...	...	...	...	...	
Motherwell dep.			3 21	...	...	...	...	...	...	...	
Holytown			...	3 29	3 37	3 56	3 56	3 56	4 4	4 13	To Stranraer.
Coatbridge			3 30	3 36	3 44	4 3	4 3	4 3	4 10	4 19	
Larbert			3 49	3 55	4 3	4 22	4 22	4 22	4 28	4 37	
Stirling arr.			...	...	4 14	4 32	4 32	4 32	4 38	4 47	
Stirling dep.			3 59	4 5	4 17	4 37	...	4 37	4 44	4 50	
Blackford			4 20	4 27	4 39	4 58	...	4 58	5 5	5 12	
Hilton Junction			4 40	4 48	5 0	5 17	...	5 17	5 23	5 30	
Perth (General) arr.			4 45	4 53	5 5	5 21	...	5 21	5 28	5 35	
Perth (General) dep.			4 52	5 0 5 9 To Inverness, via Carr Bridge, as shown in Working Time Table. 5 20 To Inverness, via Carr Bridge, as shown in Working Time Table.	5 30				5 40		
Coupar Angus	Limited Load.	Limited Load.	Limited Load.	5 22	Limited Load. To Inverness, via Forres as shown in Working Time Table.	Limited Load.	Limited Load.	Limited Load.	Run as shown in Working Time Table.		Limited Load.
Alyth Junction				5 27							
Forfar arr.				...							
Forfar dep.				5 47							
Bridge of Dun				6 0							
Kinnaber Junction				6 6							
Laurencekirk				6 16							
Stonehaven	...	...		6 34							
Aberdeen arr.	...	...		7 0					7 40		
Stanley dep.	...	...	5 4	...		...	...	...	...		...
Ballinluig	...	...	5 33	...		...	...	...	...		...
Pitlochry	...	...	5 39	...		...	...	...	...		...
Blair Atholl	...	...	5 51	...		...	...	...	...		...
Dalnaspidal	...	...	6 21	...		...	...	...	...		...
Dalwhinnie arr.	...	...	L 6 36	...		...	...	...	...		...
Dalwhinnie dep.	...	...	6 40	...		...	...	...	...		...
Kingussie	...	...	6 57	...		...	...	...	...		...
Aviemore arr.	...	...	Y 7 14	...		...	...	...	...		...
Aviemore dep.	...	...	7 20	... ...	...	...	...	...	...		...
Carr Bridge	...	...	7 † 32	... ...	...	...	...	...	...		...
Tomatin	...	...	7 † 53	... ...	...	...	...	...	...		...
Moy	...	...	8 † 1	... ...	...	...	...	...	...		...
Daviot	...	...	8 † 9	... ...	...	...	...	...	...		...
Culloden Moor	...	...	8 † 16	... ...	...	...	...	...	...		...
Inverness arr.	...	...	8 26	... 8 45 9 5	10 47	...	...	...	...		...

Y—Collection of Tickets. L—Locomotive purposes.

No. **1**—Manchester and Euston to Edinburgh. Wigan depart 5.32 p.m.

Nos. **1** and **2**—5.5 p.m., Manchester (Exchange) to Glasgow, to be retimed to arrive Carlisle 8.19 p.m., depart 8.25 p.m., and run three minutes later thence to destination.

No. **2**—Euston, Manchester and Liverpool to Glasgow. Wigan depart 5.38 p.m.

No. **3—For Inverness via Carr Bridge. Calls at Stations marked † if required to set down Passengers from England.**

No. **5—For Aberdeen, with Inverness via Carr Bridge portion if necessary.**

No. **6**—For Inverness, via Forres. Does not run when No. **7** runs.

No. **7**—Wigan to Aberdeen and Perth, and Euston to Oban. Does not run when Nos. **6**, **8** or **10** run.

No. **8**—Euston to Oban. Does not run when No. **7** runs.

No. **10**—Wigan to Aberdeen and Perth. Does not run when No. **7** runs. Runs nine minutes later when No. **8** runs.

Nos. **11** and **12**—First and Second portions of 7.40 p.m., London (Euston) to Aberdeen. Nine minutes later from Carlisle to Perth when Nos. **8** and **10** run; Perth depart 5.49, Aberdeen 7.45 a.m.

No. **13**—Runs nine minutes later when No. **12** is retimed nine minutes later as shown above.

An advice will be sent to the Stations worded on the following lines :—

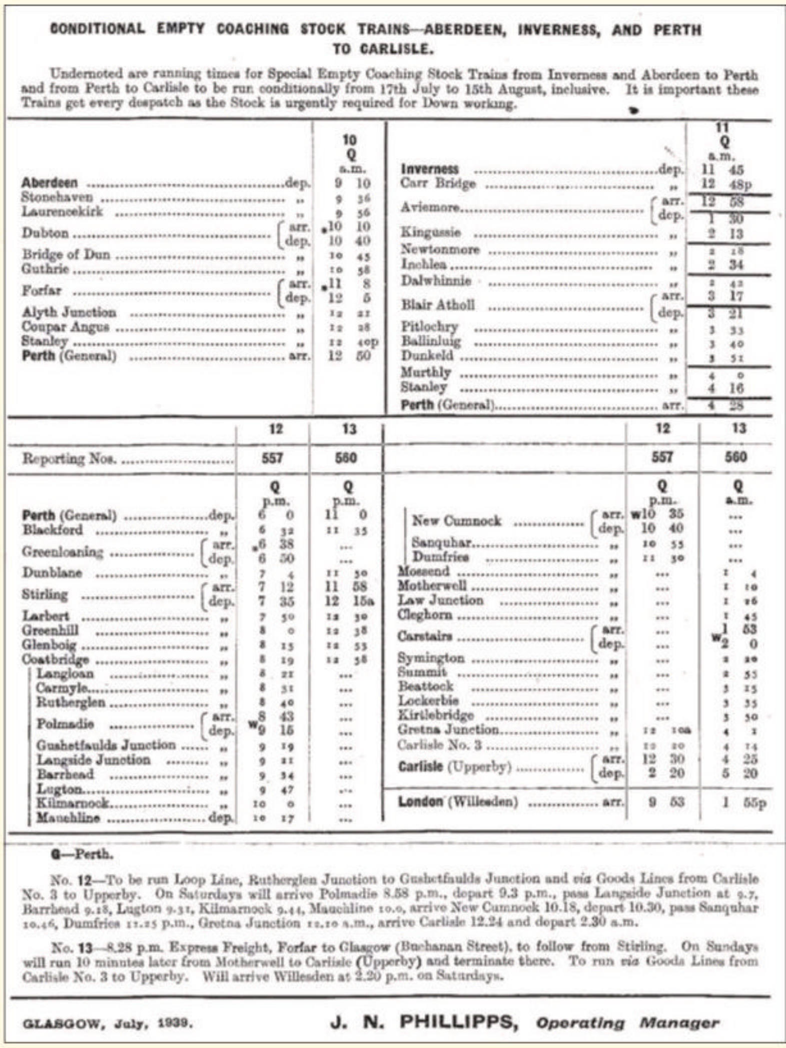
" Night Tourist Expresses, Notice No. 2 N., Nos. 3, 5, 7, running to-night,"

and on receipt of this advice the Station Master will be expected to advise all concerned at his Station in the same way as if the full information given herein were embodied in the advice.

At Stations where there are Locomotive Sheds, the Station Master will be responsible for advising the Locomotive Foreman particulars of the divisions immediately on receipt of the telegraphic advice.

A supply of this Notice to be kept on hand for reference as required.

For Conditional Empty Coaching Stock Trains from Aberdeen, Inverness, and Perth to Carlisle see other side.



CONDITIONAL EMPTY COACHING STOCK TRAINS—ABERDEEN, INVERNESS, AND PERTH TO CARLISLE.

Undernoted are running times for Special Empty Coaching Stock Trains from Inverness and Aberdeen to Perth and from Perth to Carlisle to be run conditionally from 17th July to 15th August, inclusive. It is important these Trains get every despatch as the Stock is urgently required for Down working.

	10 Q a.m.
Aberdeen dep.	9 10
Stonehaven	9 36
Laurencekirk	9 56
Dubton arr.	•10 10
Dubton dep.	10 40
Bridge of Dun	10 45
Guthrie	10 58
Forfar arr.	•11 8
Forfar dep.	12 5
Alyth Junction	12 21
Coupar Angus	12 28
Stanley	12 40p
Perth (General) arr.	12 50

	11 Q a.m.
Inverness dep.	11 45
Carr Bridge	12 48p
Aviemore arr.	12 58
Aviemore dep.	1 30
Kingussie	2 13
Newtonmore	2 18
Inchlea	2 34
Dalwhinnie	2 42
Blair Atholl arr.	3 17
Blair Atholl dep.	3 21
Pitlochry	3 33
Ballinluig	3 40
Dunkeld	3 51
Murthly	4 0
Stanley	4 16
Perth (General) arr.	4 28

	12	13
Reporting Nos.	557	560
	Q p.m.	Q p.m.
Perth (General) dep.	6 0	11 0
Blackford	6 32	11 35
Greenloaning arr.	•6 38	...
Greenloaning dep.	6 50	...
Dunblane	7 4	11 50
Stirling arr.	7 12	11 58
Stirling dep.	7 35	12 15a
Larbert	7 50	12 30
Greenhill	8 0	12 38
Glenboig	8 15	12 53
Coatbridge	8 19	12 58
Langloan	8 21	...
Carmyle	8 31	...
Rutherglen	8 40	...
Polmadie arr.	W 8 43	...
Polmadie dep.	9 15	...
Gushetfaulds Junction	9 19	...
Langside Junction	9 21	...
Barrhead	9 34	...
Lugton	9 47	...
Kilmarnock	10 0	...
Mauchline dep.	10 17	...
	Q p.m.	Q a.m.
New Cumnock arr.	W10 35	...
New Cumnock dep.	10 40	...
Sanquhar	10 55	...
Dumfries	11 30	...
Mossend	...	1 4
Motherwell	...	1 10
Law Junction	...	1 26
Cleghorn	...	1 45
Carstairs arr.	...	W 1 53
Carstairs dep.	...	2 0
Symington	...	2 20
Summit	...	2 55
Beattock	...	3 15
Lockerbie	...	3 35
Kirtlebridge	...	3 50
Gretna Junction	12 10a	4 1
Carlisle No. 3	12 20	4 14
Carlisle (Upperby) arr.	12 30	4 25
Carlisle (Upperby) dep.	2 20	5 20
London (Willesden) arr.	9 53	1 55p

G—Perth.

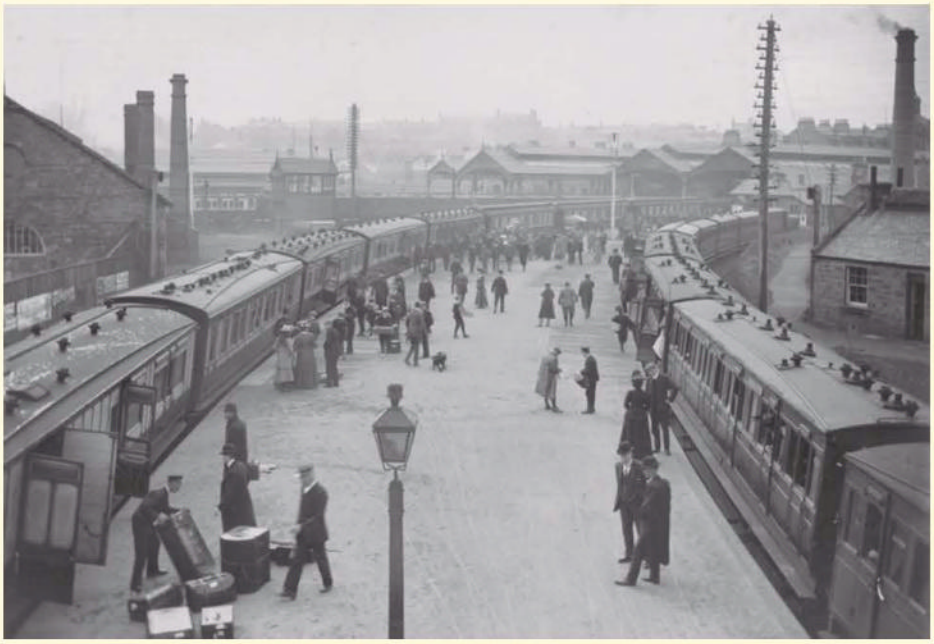
No. **12**—To be run Loop Line, Rutherglen Junction to Gushetfaulds Junction and *via* Goods Lines from Carlisle No. 3 to Upperby. On Saturdays will arrive Polmadie 8.58 p.m., depart 9.3 p.m., pass Langside Junction at 9.7, Barrhead 9.18, Lugton 9.31, Kilmarnock 9.44, Mauchline 10.0, arrive New Cumnock 10.18, depart 10.30, pass Sanquhar 10.46, Dumfries 11.25 p.m., Gretna Junction 12.10 a.m., arrive Carlisle 12.24 and depart 2.30 a.m.

No. **13**—8.28 p.m. Express Freight, Forfar to Glasgow (Buchanan Street), to follow from Stirling. On Sundays will run 10 minutes later from Motherwell to Carlisle (Upperby) and terminate there. To run *via* Goods Lines from Carlisle No. 3 to Upperby. Will arrive Willesden at 2.20 p.m. on Saturdays.

GLASGOW, July, 1939.

J. N. PHILLIPPS, *Operating Manager*

FIC TO SCOTLAND – SUMMER 1939



Upon arrival at Inverness during the first decade of the twentith century, a long overnight train from Euston of West Coast Joint Stock has been backed into the left-hand platform on the northern side of the station. Passengers are disembarking and making their way either into the town or to board the Highland train on the right destined for the further north or west. (Author's Collection)

development and make-up of vehicles in these trains will be found in *Backtrack,* Vol.21 Dec. 2007, pp732-741.[5]

The arrangements of front-line express trains were listed in the passenger train marshalling arrangements issued three times a year to match the requirements of the current working timetables.[6,7] The formation of each train was listed from its point of departure, any additions or detachments made en route and the disposal of the vehicles on reaching its destination. Also included in general might be any provisional or extra pre-planned trains for only part of the period to cope with peaks in demand. These were generally annotated by the dates of their intended implementation, or indicated by a 'Q' to be run if required. Nearer the time of departure, based on experience of previous years' traffic figures, the possible need for unplanned additional trains would be notified by the issue of a stencil notice, or even at short notice by telegraph or telephone. Supporting these plans were motive power rosters, sleeping car and dining car circuits setting out locomotive duties and the allocation of cars to their respective trains.

In this particular case, a number of options has been developed, no doubt in some detail, and depending on the number of sleeping berths to various destinations already booked by passengers and paid for, a suitable combination trains selected to meet the demand, and all those involved duly notified, see notes at the foot of the Special Notice.

Reporting No.129

Displaced as it was at 1.30pm by 'The Coronation Scot', this was the regular 'Mid-Day Scot' 2.00pm restaurant car limited load express passenger train from Euston (SX) to Edinburgh (arr 9.40pm) and Glasgow (arr 9.55pm) with through coaches to Aberdeen (arr 3.00am) and joined by those from Manchester to Edinburgh and Plymouth to Glasgow.[8] When duplicated, instead of Carlisle, the train was divided at Crewe and separate trains run forward to Edinburgh (Column 1) and Glasgow (Column 2) with through coaches from Manchester and Liverpool, and to Aberdeen, respectively, as on Saturdays anyway. As the train was scheduled to stop at Carlisle Citadel, engines were changed there, rather than Kingmoor.

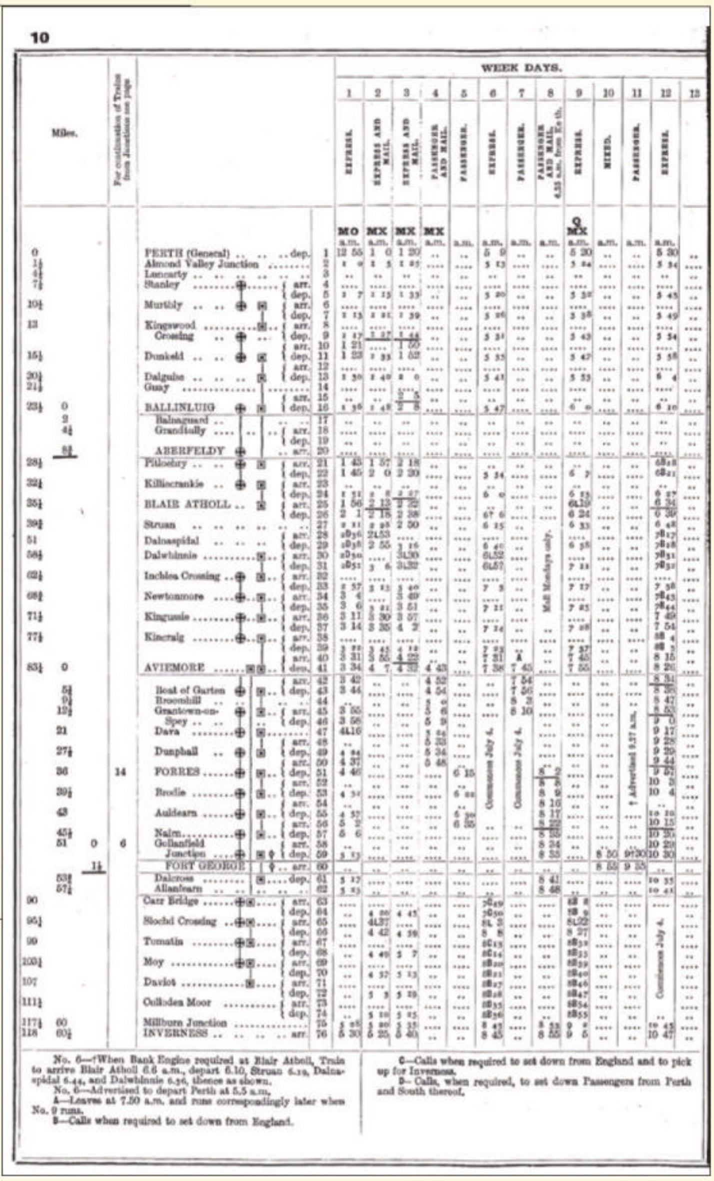
Reporting No.149

'The Royal Highlander' at 7.20pm Limited Load off Euston (MX) for all points north of Perth was Reporting No.149. During the quieter periods of the year, this ran as a single train to Perth (MSX), where it divided to form three through trains with sleeping cars to Aberdeen; Inverness via Carrbridge, with a section for Boat of Garten and stations to Inverness via Forres.[9] Restaurant cars were included from London to Crewe each evening serving dinner and in the morning from Perth to Inverness for breakfast. As the train was not scheduled to stop at Carlisle station, engines would be changed at Crewe and Motherwell, as well of course at Perth. The arrangement of the coaches in the summer 1938 will be found in the article on the 'Royal Highlander' in *Backtrack Special Issue No. 1,* LMS 1998, pp57-63.[10]

The first step to meet increased demand was to duplicate No.149 (Column 2) with a train at 7.25pm from Euston with the customary dining car to Crewe, to Aberdeen (arr.7.00m) with one or two portions for Inverness via Carrbridge, as necessary.[11] On this occasion and in several of the following trains the locomotives seem to have been changed at Kingmoor.

Reporting No.153

Ordinarily Reporting No.153 was the 7.40pm from Euston to Aberdeen and included the portion for Oban dropped off at Stirling but, as pressure built, from 25 July, this could be run



10

WEEK DAYS.

No. 6—†When Bank Engine required at Blair Atholl, Train to arrive Blair Atholl 6.6 a.m., depart 6.10, Struan 6.19, Dalnaspidal 6.44, and Dalwhinnie 6.56, thence as shown.
No. 6—Advertised to depart Perth at 5.5 a.m.
A—Leaves at 7.50 a.m. and runs correspondingly later when No. 9 runs.
B—Calls when required to set down from England.

C—Calls when required to set down from England and to pick up for Inverness.
D—Calls, when required, to set down Passengers from Perth and South thereof.

Page 10 of the LMS Working Timetable 3rd July until 24th September inc. 1939, for the beginning of the weekday from Perth to Inverness. (LMS, Author's Collection) as three possible separate options, destined for:

At 7.32pm No. 153 for Inverness via Forres (Column 6)

At 7.36pm No. 153 Euston to Oban, plus through coaches for Aberdeen and Inverness added at Wigan. (Column 7)

At 7.38pm No. 153/2 in the absence of 7.36pm for Stirling and Oban (Column 8).

Thus, either a train consisting of through coaches and a sleeping car from Euston destined for Oban and through coaches from Manchester and Liverpool added at Wigan was run, or alternatively a discrete train for Oban would be operated. At Stirling upon arrival at 4.10am ordinarily the through coaches from Euston to Oban were detached and added to the 4.10am express and mail from Glasgow Central departing for Oban at 5.45am. From 24th July, however, an additional express train for Oban with a dining car was laid on at 5.10am, arriving 23 minutes earlier at 8.32am.

Reporting No.231

Reporting No.231 originates as 11.20pm from Manchester Exchange and 10.15pm from Birmingham to Glasgow, Perth and Edinburgh joining the West Coast Main Line at Wigan at 11.53pm, becoming Reporting No.305 on reaching the Northern Division at Carlisle (Column 10). At Carstairs the train was divided, continuing northwards and to Glasgow Central arrive 4.10am.

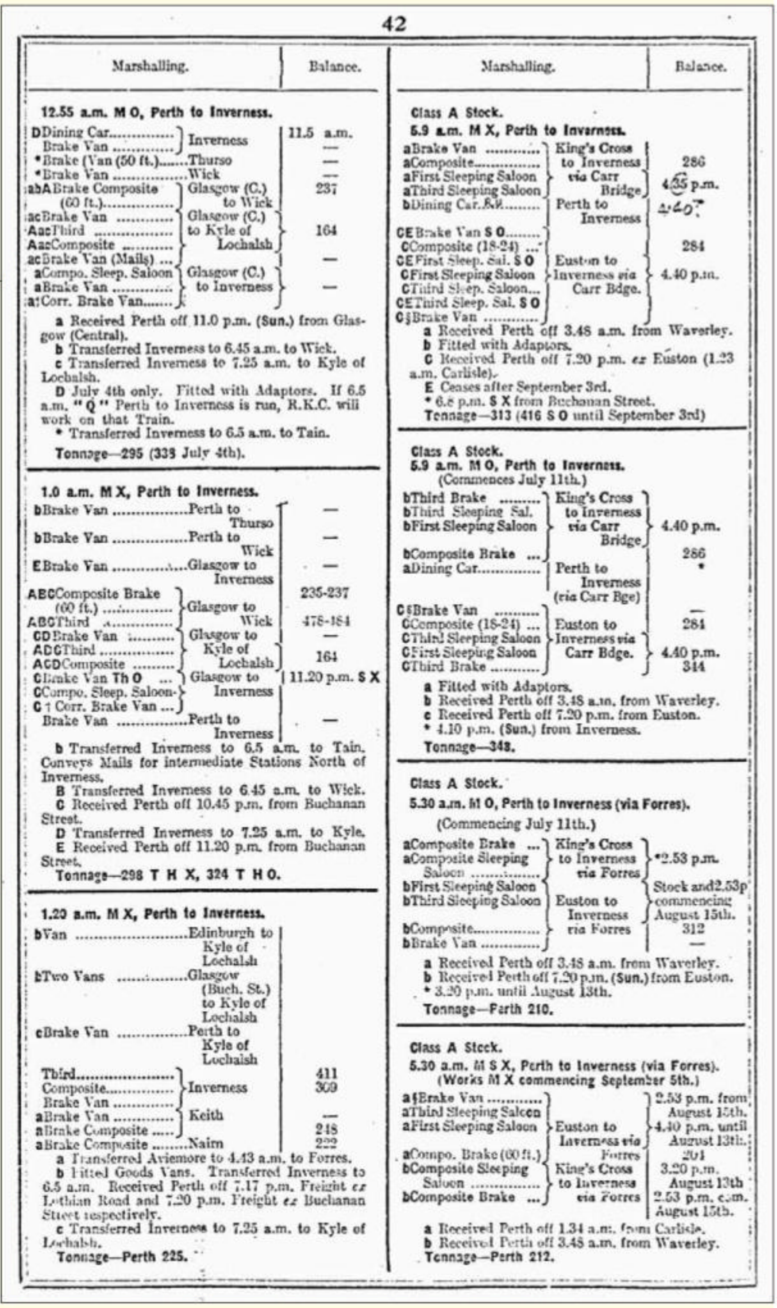
Reporting No.151

Having dealt with passengers destined for the more far-flung territory, the expected increase in traffic for the more central locations in the Highlands was coped with by duplicating the 7.40pm to Aberdeen as far as Perth with 7.44pm (Column 11) and 7.50pm departures (Column 12) from Euston. From Perth a single train continued at 5.40am to Aberdeen, or nine minutes later if some of the previous trains were duplicated.

Upon arrival at Perth the following trains were available to take passengers on into the Highlands: 5.09am to Inverness via Carrbridge, 5.30am to Inverness via Forres (without dining car), 6.30am mail to Inverness and Aberdeen ex-Carlisle, 1.23am.

Reporting No.155

The final train considered on the special traffic notice was No.155, the 8.00pm from Euston (Column 13) for Stranraer Harbour from where the short sea crossing landed passengers at Larne in Northern Ireland. Important connections with trains from the NE and NW of England and southern Scotland were made at Carlisle (Citadel) station. Like No.151, there was at risk of being delayed by nine minutes due the presence of so many trains proceeding north to Carlisle and Gretna, the junction for the Glasgow & South Western main line to Glasgow and the 'Port Road' from Dumfries.



An extract from the Passenger train marshalling arrangements for July 1938 showing a selection of trains remarshalled at Perth in the early morning. (LMS, Author's Collection)

42

12.55 a.m. M O, Perth to Inverness.

Marshalling.		Balance.
DDining Car	Inverness	11.5 a.m.
Brake Van		—
*Brake (Van (50 ft.)	Thurso	—
*Brake Van	Wick	—
abABrake Composite (60 ft.)	Glasgow (C.) to Wick	237
acBrake Van	Glasgow (C.) to Kyle of Lochalsh	
AacThird		164
AacComposite		
acBrake Van (Mails)		—
aCompo. Sleep. Saloon	Glasgow (C.) to Inverness	
aBrake Van		—
a†Corr. Brake Van		

a Received Perth off 11.0 p.m. (**Sun.**) from Glasgow (Central).
b Transferred Inverness to 6.45 a.m. to Wick.
c Transferred Inverness to 7.25 a.m. to Kyle of Lochalsh.
D July 4th only. Fitted with Adaptors. If 6.5 a.m. "**Q**" Perth to Inverness is run, R.K.C. will work on that Train.
* Transferred Inverness to 6.5 a.m. to Tain.
Tonnage—295 (338 July 4th).

1.0 a.m. M X, Perth to Inverness.

Marshalling.		Balance.
bBrake Van	Perth to Thurso	—
bBrake Van	Perth to Wick	—
EBrake Van	Glasgow to Inverness	—
ABCComposite Brake (60 ft.)	Glasgow to Wick	235-237
ABCThird		478-484
CDBrake Van	Glasgow to Kyle of Lochalsh	—
ADCThird		164
ACDComposite		
CBrake Van **Th O**	Glasgow to Inverness	11.20 p.m. **S X**
CCompo. Sleep. Saloon		
C†Corr. Brake Van		
Brake Van	Perth to Inverness	—

b Transferred Inverness to 6.5 a.m. to Tain. Conveys Mails for intermediate Stations North of Inverness.
B Transferred Inverness to 6.45 a.m. to Wick.
C Received Perth off 10.45 p.m. from Buchanan Street.
D Transferred Inverness to 7.25 a.m. to Kyle.
E Received Perth off 11.20 p.m. from Buchanan Street.
Tonnage—298 T H X, 324 T H O.

1.20 a.m. M X, Perth to Inverness.

Marshalling.		Balance.
bVan	Edinburgh to Kyle of Lochalsh	
bTwo Vans	Glasgow (Buch. St.) to Kyle of Lochalsh	
cBrake Van	Perth to Kyle of Lochalsh	
Third	Inverness	411
Composite		309
Brake Van		
aBrake Van	Keith	—
aBrake Composite		248
aBrake Composite	Nairn	222

a Transferred Aviemore to 4.43 a.m. to Forres.
b Fitted Goods Vans. Transferred Inverness to 6.5 a.m. Received Perth off 7.17 p.m. Freight *ex* Lothian Road and 7.20 p.m. Freight *ex* Buchanan Street respectively.
c Transferred Inverness to 7.25 a.m. to Kyle of Lochalsh.
Tonnage—Perth 225.

Class A Stock.
5.9 a.m. M X, Perth to Inverness.

Marshalling.		Balance.
aBrake Van	King's Cross to Inverness via Carr Bridge	
aComposite		286
aFirst Sleeping Saloon		4.35 p.m.
aThird Sleeping Saloon		
bDining Car	Perth to Inverness	4.40?
CEBrake Van **S O**	Euston to Inverness *via* Carr Bdge.	
CComposite (18-24)		284
CEFirst Sleep. Sal. **S O**		
CFirst Sleeping Saloon		4.40 p.m.
CThird Sleep. Saloon		
CEThird Sleep. Sal. **S O**		
C§Brake Van		

a Received Perth off 3.48 a.m. from Waverley.
b Fitted with Adaptors.
C Received Perth off 7.20 p.m. *ex* Euston (1.23 a.m. Carlisle).
E Ceases after September 3rd.
* 6.8 p.m. **S X** from Buchanan Street.
Tonnage—313 (416 S O until September 3rd)

Class A Stock.
5.9 a.m. M O, Perth to Inverness.
(Commences July 11th.)

Marshalling.		Balance.
bThird Brake	King's Cross to Inverness via Carr Bridge	
bThird Sleeping Sal.		
bFirst Sleeping Saloon		4.40 p.m.
bComposite Brake		286
aDining Car	Perth to Inverness (via Carr Bge)	*
C§Brake Van	Euston to Inverness via Carr Bdge.	—
CComposite (18-24)		284
CThird Sleeping Saloon		
CFirst Sleeping Saloon		4.40 p.m.
CThird Brake		344

a Fitted with Adaptors.
b Received Perth off 3.48 a.m. from Waverley.
c Received Perth off 7.20 p.m. from Euston.
* 4.10 p.m. (**Sun.**) from Inverness.
Tonnage—348.

Class A Stock.
5.30 a.m. M O, Perth to Inverness (via Forres).
(Commencing July 11th.)

Marshalling.		Balance.
aComposite Brake	King's Cross to Inverness via Forres	*2.53 p.m.
aComposite Sleeping Saloon		
bFirst Sleeping Saloon		Stock and 2.53p commencing August 15th.
bThird Sleeping Saloon	Euston to Inverness via Forres	
bComposite		312
bBrake Van		—

a Received Perth off 3.48 a.m. from Waverley.
b Received Perth off 7.20 p.m. (**Sun.**) from Euston.
* 3.20 p.m. until August 13th.
Tonnage—Perth 210.

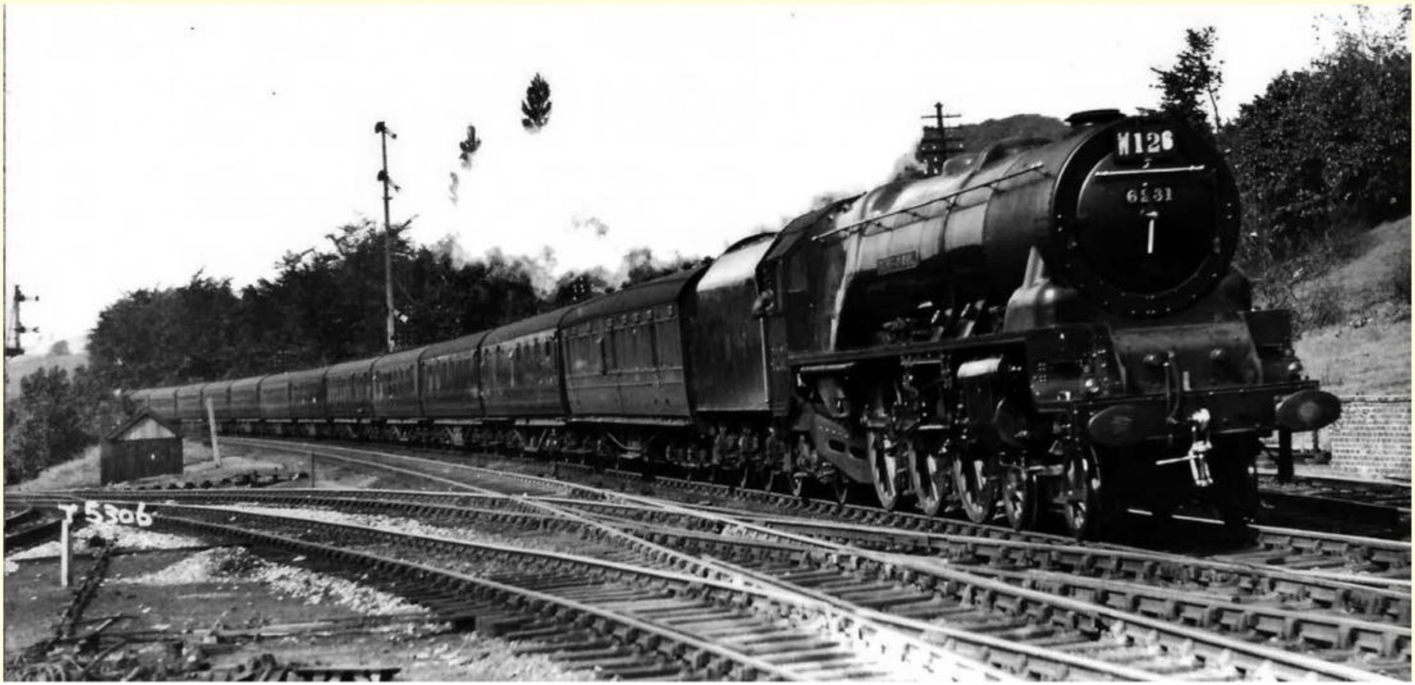
Class A Stock.
5.30 a.m. M S X, Perth to Inverness (via Forres).
(Works M X commencing September 5th.)

Marshalling.		Balance.
a§Brake Van	Euston to Inverness via Forres	2.53 p.m. from August 15th. 4.40 p.m. until August 13th.
aThird Sleeping Saloon		
aFirst Sleeping Saloon		
aCompo. Brake (60 ft.)		201
bComposite Sleeping Saloon	King's Cross to Inverness via Forres	3.20 p.m. August 13th 2.53 p.m. com. August 15th.
bComposite Brake		

a Received Perth off 1.34 a.m. from Carlisle.
b Received Perth off 3.48 a.m. from Waverley.
Tonnage—Perth 212.

Implementing the Special Trains

The commercial and operating staff would be monitoring sales the booking offices were receiving and as the departure date approached would make a judgement on when to, firstly



In the southerly direction reporting number W128 the up 'Royal Scot' train behind recently introduced unstreamlined Stanier 'Princess Coronation' Class No.6231 *Duchess of Atholl* running through Oxenholme with at least twelve coaches on. It is seen in crimson lake livery sometime between 28th June 1938 and 1st June 1940 when its single chimney was replaced by a double. (Author's Collection) add additional coaches, mainly sleeping cars in this case, or even order extra trains and all that entailed in providing motive power, coaching stock, including through coaches and possibly dining cars, staff and any necessary adjustments to the running of other trains.

The laying-on of so many extra trains might, one would have thought, have taxed the LMS's ability to meet such an increase in demand for sleeping cars and dining cars, let alone the specialist staff to attend to passengers' needs, clean and service the vehicles ready for their next trip. However, this was the sort of thing the railways had been doing for years and had built up considerable experience in being able to meet the customers' needs without undue difficulty. Whether this was profitable, when so much plant spent long periods idle between peaks in demand, is another matter not explored here.

Sleeping cars

Over the period 1937 to 1941 the LMS had 224 sleeping cars on strength of which 216 are accounted for in the table above, while in 1937 it had 299 dining cars including kitchen cars.[12]

Dining cars

Most of the trains departing from Euston early each evening included a dining car offering our passengers dinner, before being removed during engine change at Crewe. Likewise, upon arrival at Perth several, but not all, trains had a dining car added to enable passengers to partake of breakfast before reaching their destinations. Those making for Oban gained such facilities from Stirling onwards. The duties of each dining car, or combination of cars, was set out in the LMS's breakfast, luncheon, tea & dining car circuits concurrent with the issue of the timetable.[13] As well as detailing each circuit, a list of the individual cars allocated to the division to meet its commitments was tabulated.

The Dining Car Circuits for July 1938, however, indicate that of the 224 dining cars, 61 were allocated to the Northern Division from which it had to fulfil 45 circuits, seven consisting of two vehicles.[14&15]

Table 1: LMS Sleeping Cars system-wide in 1938

Type	Diagram	Dims (ft-in)	Berths		No. off	LMS 2nd Nos.
			1st	3rd		
SLF	1739	68-0 x 9-3	12	-	10	300-309
	1705	68-0 x 9-3	12	-	42	310-351
	1926	69-0 x 9-3	12	-	26	352-377
SLT	1709	60-0 x 9-3	-	28	85	500-584
	1863	65-0 x 9-3	-	28	15	585-599
SLC	1844	68-0 x 9-2¼	6	14	12	700-711
SLF	LNWR 17	65-6 x 9-0	11	-	8 max	
	LNWR 16	65-6 x 9-0	11	-	6 max	
	WCJS 1	68-0 x 9-0	11	-	8	484-90/6
	LNWR 14	68-0 x 9-0	11	-	4	491-495
	Totals		3,108	5,768	216	

Table 2: LMS Dining Cars allocated to Northern Division July 1938

Type	Dims (ft-in)	Seats		No. off	LMS 2nd Nos.	Vehicle description
		1st	3rd			
RF	65-6 x 9-0	24	-	1	157	MR, D571
RC		24	15	1	299	Ex-G&SW, Whitelegg
RU		18	-	1	92	MR, D436
RC		12	24	3	289, 290, 292	Ex-LNWR, D34
RU		12	18	1	298	Ex-G&SW, Drummond
RF	68-0 x 9-3	24	-	15	39	LMS, P3, D1900
RC		12	18	7	240-3, 250-2	LMS, P3, D1938
RT		-	30	7	101-3, 111—4	LMS, P3, D1861/1901
RU	63-10 x 8-11	12	16	1	211	Ex-Pullman
RU		13	14	2	212-3	Ex-Pullman
RU		12	21	3	216-8	Ex-Pullman
RU	59-0 x 9-0	18	-	1	95	MR, D571
RU	57-10 x 8-11	12	18	2	214-5	Ex-Pullman
RU	63-10 x 8-7	12	18	3	219-21	Ex-Pullman
RF	69-1 x 9-0	34	-	1	82	Ex-L&Y
RK	50-0 x 9-3	5	-	-	30079-82/100	LMS, P3, D1912
RFO	57-0 x 9-3	36	-	3	7401/41/5	LMS, P1, D1742
RCO		18	18	6	9725/40-4	LMS, P3, D1862/1903
RTO	59-0 x 9-0	-	42	3	9610-1/4	MR, D446
	Total			61		

Key to BR (ex-LNER) Codes

Code	Description
K	Kitchen only car
RF	First class dining car with kitchen
RC	Composite (1st & 3rd) dining car with kitchen
RT	Third class dining car with kitchen
RU	Unclassified (i.e. either 1st or 3rd) dining car with kitchen
RFO	First class open dining car without kitchen
RCO	Composite (1st & 3rd) open dining car without kitchen
RTO	Third class open dining car without kitchen
RUO	Unclassified (i.e. either 1st or 3rd) open dining car without kitchen
SLF	First class sleeping car
SLC	Composite (1st & 3rd) sleeping car
SLT	Third class sleeping car

West Coast Express and Highland Postal Trains

For all the carefully laid-out plans to accommodate this peak in tourist traffic from late July onwards, it is not difficult to imagine the disruption likely to be caused in the event of a tail-back resulting from any mishap along the length of the line, especially early in the sequence once passed Gretna and thus committed to the line over Beattock, when serious delays could quickly build up.[16] Only seventeen minutes after the departure of the train from Carlisle Citadel for Stranraer, the Down Postal was due to draw in and undertake its exchange of mail with the feeder trains, against the risk of penalties imposed by the Post Office for any delays.

Further north, interwoven with all this overnight traffic for Perth and beyond, were the regular express passenger mail trains. The 10.45pm with the post from Glasgow Buchanan Street, including a sleeping car, set out from Perth at 1.00am, followed by another at 1.20am, for Inverness. Upon arrival at Aviemore they divided, the portions setting off for Inverness by the Direct Route and the old line via Forres, arriving at 5.25am/5.40am respectively. They also spawned an ordinary passenger mail train to Forres where it connected with the 6.35am mail train from Keith and arrived in Inverness at 8.55am.[17]

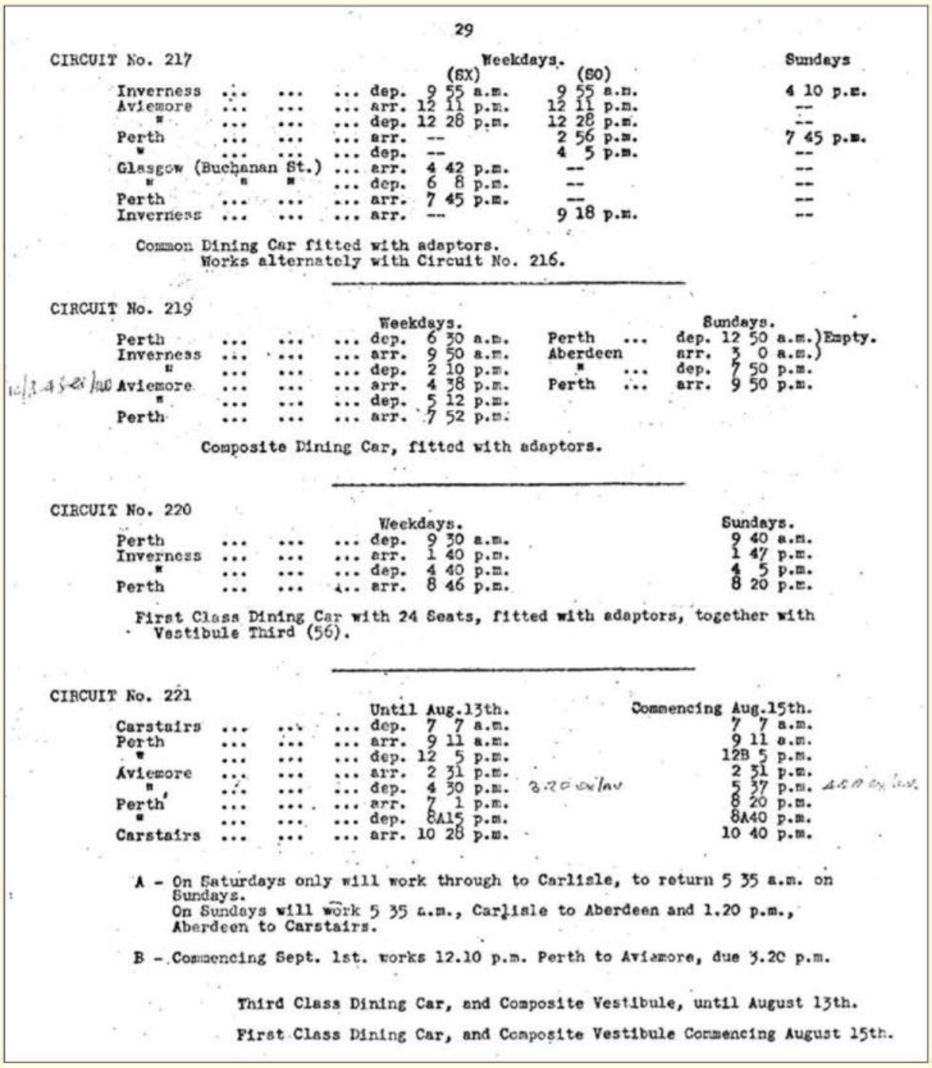
Later on, connecting with the West Coast mail to Aberdeen and following the overnight sleeping car trains, was the 6.30am express mail departure from Perth for Inverness with a sleeping car and a dining car. At Aviemore it was divided with portions for Inverness, via Carrbridge and Forres, arriving at 9.50am and 11.14am respectively.

Passenger care

The value placed by the railway on this class of passenger may be judged by the cryptic notes peppering the working timetable.[18] For instance, when running from the south more than ten minutes late, the sleeping saloon car attendant was expected to wire the station master at Perth, with particulars of passengers for the 5.45am onward from Perth. Arrangements would also be made when required to set down passengers from Crewe and south of Carlisle at stations not otherwise due to be called at. Likewise, in the same event, the Perth station master was to advise stations on the LNER lines and Forfar and Stonehaven.

Empty stock

Ordinarily coaching stock arriving at its destination would be prepared for its return journey in accordance with the train marshalling document, by being cleaned and particularly in the case of dining cars, restocked with provisions. The running of so many additional trains, however, some working in one direction only, led to the need to lay on special empty stock workings to



29

CIRCUIT No. 217

		Weekdays. (SX)	Weekdays. (SO)	Sundays
Inverness	dep.	9 55 a.m.	9 55 a.m.	4 10 p.m.
Aviemore	arr.	12 11 p.m.	12 11 p.m.	--
"	dep.	12 28 p.m.	12 28 p.m.	--
Perth	arr.	--	2 56 p.m.	7 45 p.m.
"	dep.	--	4 5 p.m.	--
Glasgow (Buchanan St.) ...	arr.	4 42 p.m.	--	--
" " " ...	dep.	6 8 p.m.	--	--
Perth	arr.	7 45 p.m.	--	--
Inverness	arr.	--	9 18 p.m.	--

Common Dining Car fitted with adaptors.
Works alternately with Circuit No. 216.

CIRCUIT No. 219

		Weekdays.	Sundays.		
Perth	dep.	6 30 a.m.	Perth ...	dep.	12 50 a.m.)Empty.
Inverness	arr.	9 50 a.m.	Aberdeen	arr.	3 0 a.m.)
"	dep.	2 10 p.m.	" ...	dep.	7 50 p.m.
Aviemore	arr.	4 38 p.m.	Perth ...	arr.	9 50 p.m.
"	dep.	5 12 p.m.			
Perth	arr.	7 52 p.m.			

Composite Dining Car, fitted with adaptors.

CIRCUIT No. 220

		Weekdays.	Sundays.
Perth	dep.	9 30 a.m.	9 40 a.m.
Inverness	arr.	1 40 p.m.	1 47 p.m.
"	dep.	4 40 p.m.	4 5 p.m.
Perth	arr.	8 46 p.m.	8 20 p.m.

First Class Dining Car with 24 Seats, fitted with adaptors, together with Vestibule Third (56).

CIRCUIT No. 221

		Until Aug.13th.		Commencing Aug.15th.	
Carstairs	dep.	7 7 a.m.		7 7 a.m.	
Perth	arr.	9 11 a.m.		9 11 a.m.	
"	dep.	12 5 p.m.		12B 5 p.m.	
Aviemore	arr.	2 31 p.m.		2 31 p.m.	
"	dep.	4 30 p.m.	3.20 ex/Inv	5 37 p.m.	4.50 ex Inv
Perth	arr.	7 1 p.m.		8 20 p.m.	
"	dep.	8A15 p.m.		8A40 p.m.	
Carstairs	arr.	10 28 p.m.		10 40 p.m.	

A - On Saturdays only will work through to Carlisle, to return 5 35 a.m. on Sundays.
On Sundays will work 5 35 a.m., Carlisle to Aberdeen and 1.20 p.m., Aberdeen to Carstairs.

B - Commencing Sept. 1st. works 12.10 p.m. Perth to Aviemore, due 3.20 p.m.

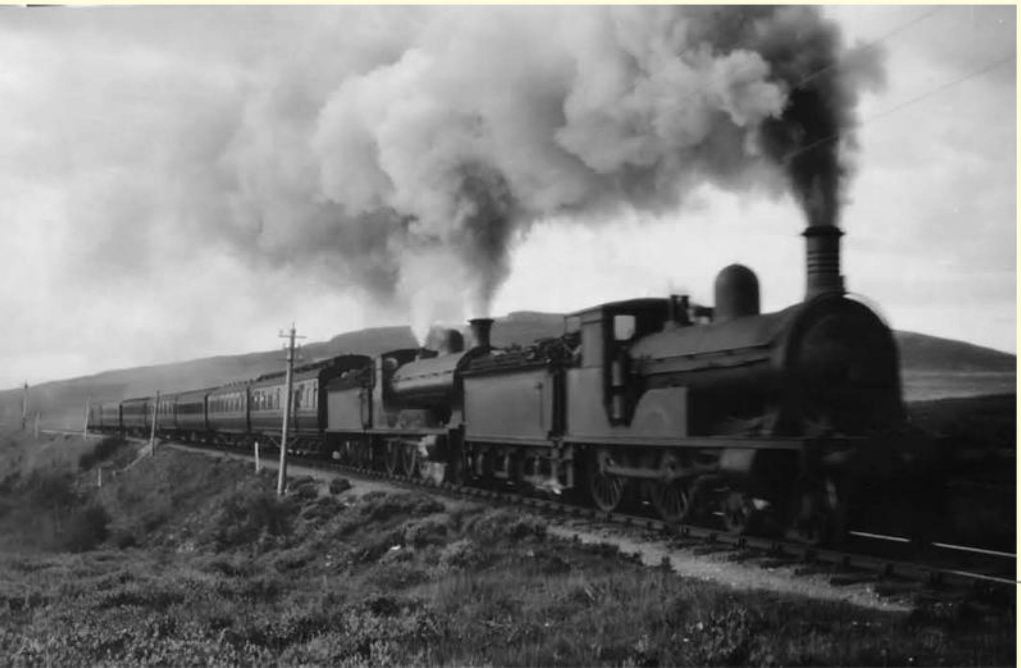
Third Class Dining Car, and Composite Vestibule, until August 13th.

First Class Dining Car, and Composite Vestibule Commencing August 15th.

Example of page from the LMS breakfast, luncheon tea and dining car circuits, commencing 4th July 1938, for the Northern Division, Circuit 219 being relevant to this article. (LMS, Author's Collection)

return surplus carriages to their home depot.[19] The reverse side of the Special Notice shows the provisional timetables for a train each from Aberdeen (Train 10) and Inverness, via Carrbridge (Train 11) to Perth. Reporting Nos.557 and 560 were two further paths from Perth (Trains 12 & 13), one via Dumfries and the other via Beattock, to Carlisle (Upperby) by the Goods Lines, and both ending up at London (Willesden). Promptly each morning from 17th July to 15th August inclusive these paths enabled stock to be returned and be available for further duties heading north from Euston by the second evening.

A decade earlier than the previous photograph a duo of ex-Highland engines, 4-4-0 No.14396 *Loch Ruthven* and 4-6-0 No.14678 *Gordon Castle* lead a seven-coach section of the 'Royal Highlander' train near Daviot on its way south to Euston. (Author's Collection)



Conclusions

The summer of 1939 was, of course, to be the last before the Second World War broke out on 3rd September; indeed, many a holiday in the Highlands and elsewhere may well have been summarily cut short, as members of the Armed Forces were recalled to their units and industry was prepared for arms and munition production. A skeleton sleeping car service of sorts was maintained during the war, mainly for the use of senior civil servants, commissioned officers and industrialists.[20] On the conclusion of hostilities, sleeping car and restaurant car services gradually improved until the rise of the motor car tempted passengers away. Nonetheless, the long drive provided an opportunity for the Motor Rail service to develop and flourish for several decades, whereby one's motor accompanied one on the overnight train.

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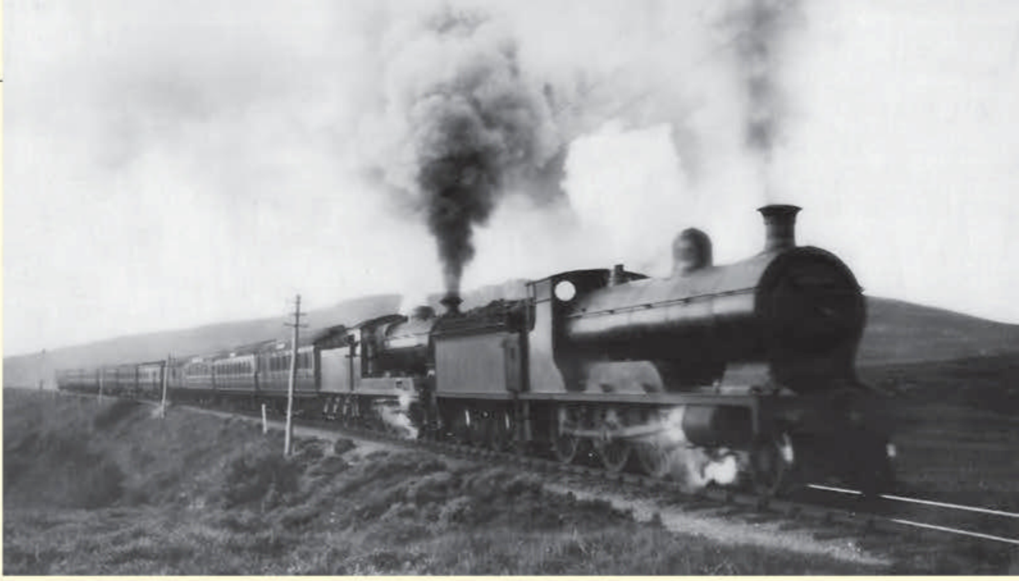
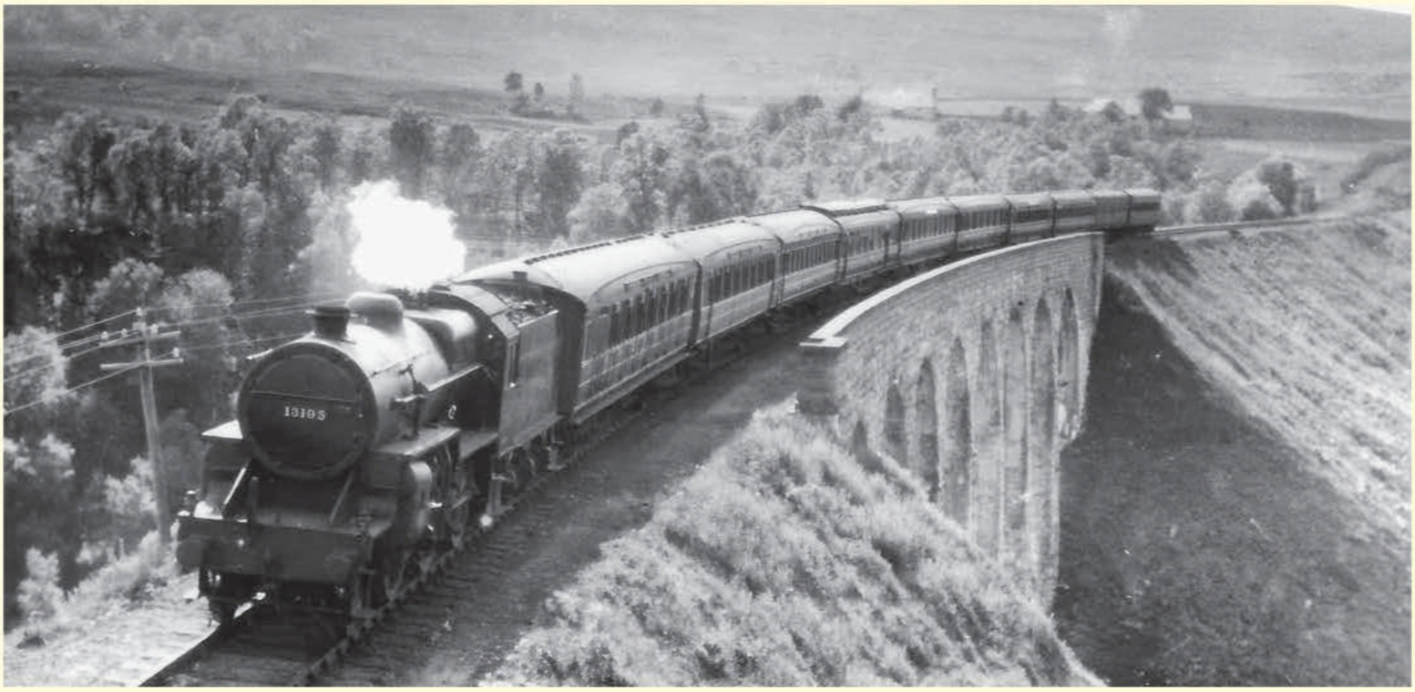
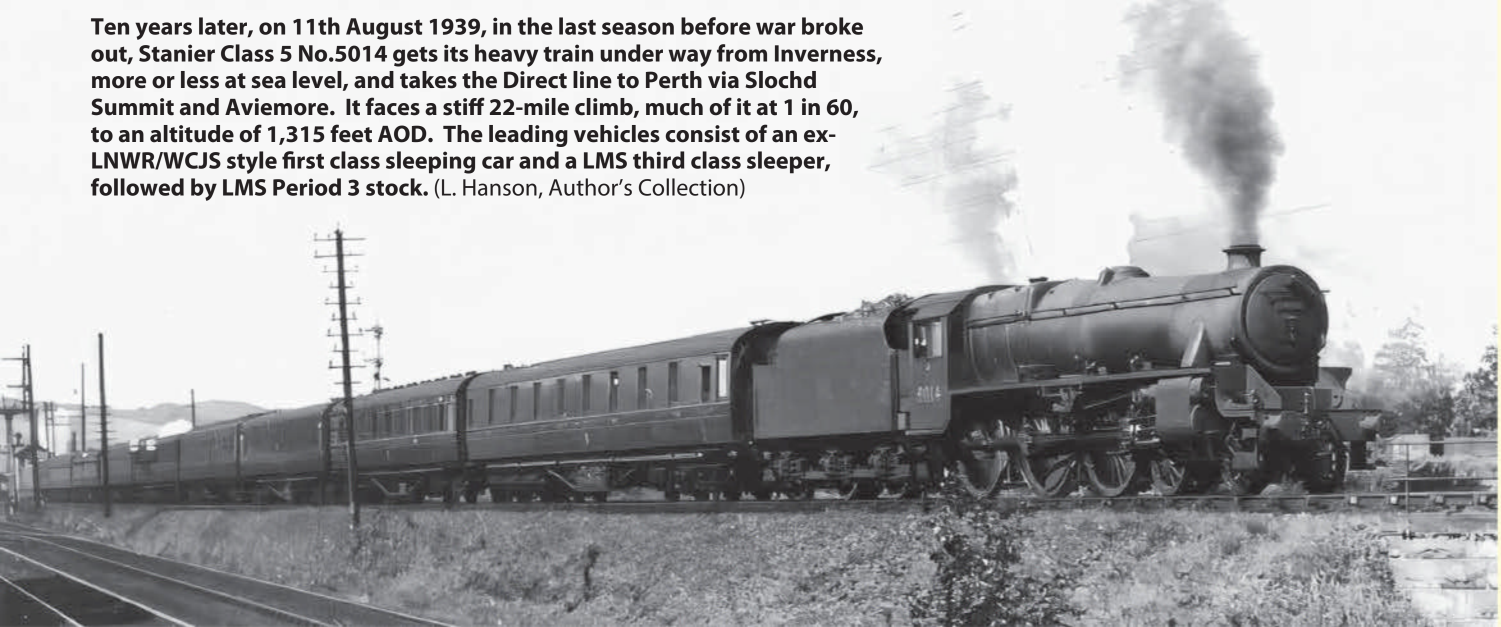


Another section of the 'Royal Highlander' at the same location, this time including a portion for King's Cross immediately behind a pair of 4-6-0s, No.14680 *Murthly Castle* and No.14769 *Clan Cameron*. The withdrawal of the first in May 1930, suggests these two photographs were taken in the late 1920s before the arrival of the Horwich Moguls let alone the Stanier 'Black Fives'. The ten-coach train is made up of an ex-East Coast Joint Stock Gresley corridor brake, a first class sleeping car, a Midland dining car detached at Perth, the remainder continuing to Euston. (Author's Collection)



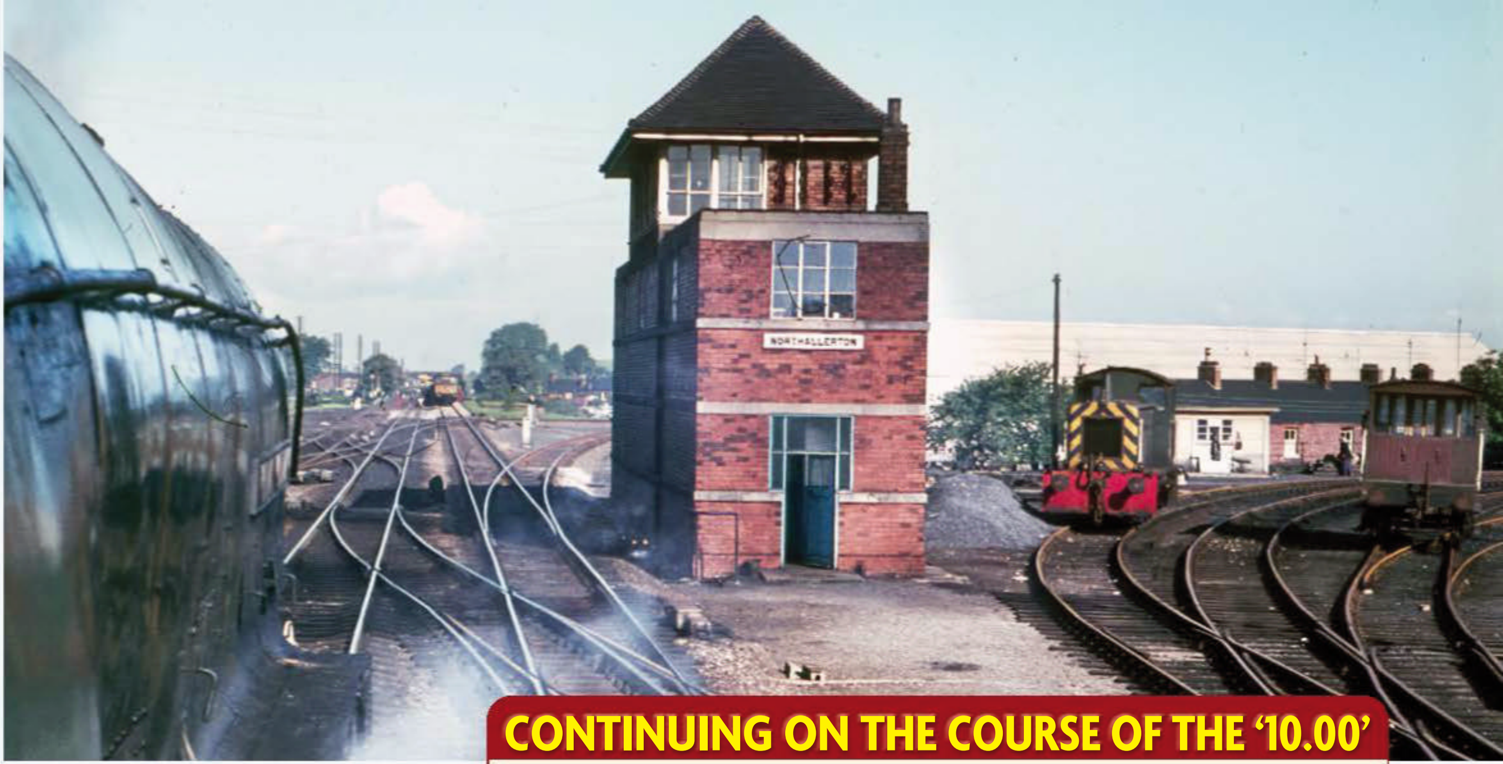
In the interval before the arrival of Stanier's steads in increasing numbers from 1934, ten Horwich Moguls were made available to the Highland Section from early 1929. Here No.13105 takes the 4.15pm from Inverness for Euston and King's Cross via Carrbridge across Slochd Viaduct on 20th July 1931. The leading three LNER coaches are a locker composite, third and first class sleeping cars plus an ex-Midland Railway twelve-wheel dining car all of which will be detached at Perth. The remaining LMS portion includes two first and two third class sleeping cars and a full brake. (H. C. Casserley, Author's Collection)



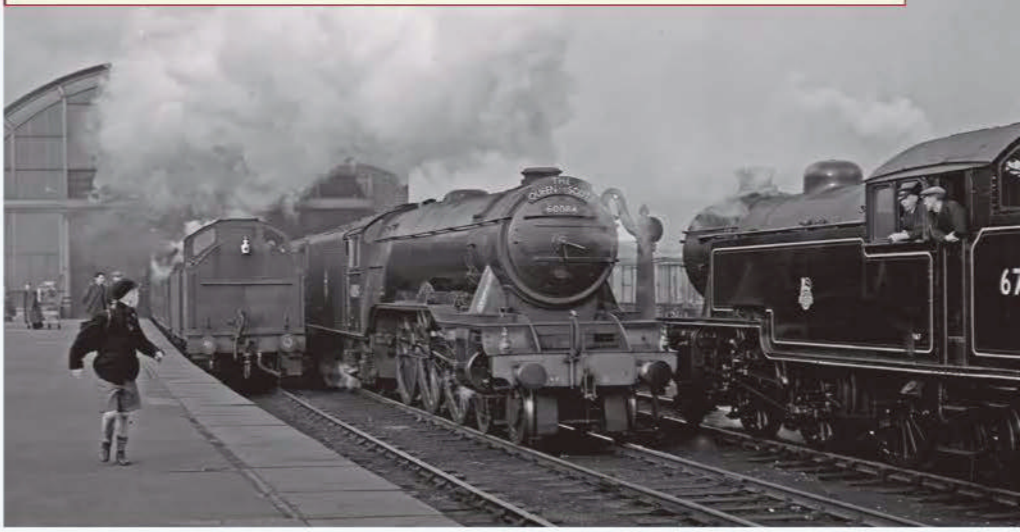
Ten years later, on 11th August 1939, in the last season before war broke out, Stanier Class 5 No.5014 gets its heavy train under way from Inverness, more or less at sea level, and takes the Direct line to Perth via Slochd Summit and Aviemore. It faces a stiff 22-mile climb, much of it at 1 in 60, to an altitude of 1,315 feet AOD. The leading vehicles consist of an ex-LNWR/WCJS style first class sleeping car and a LMS third class sleeper, followed by LMS Period 3 stock. (L. Hanson, Author's Collection)

CONTINUING ON THE COURSE OF THE '10.00'

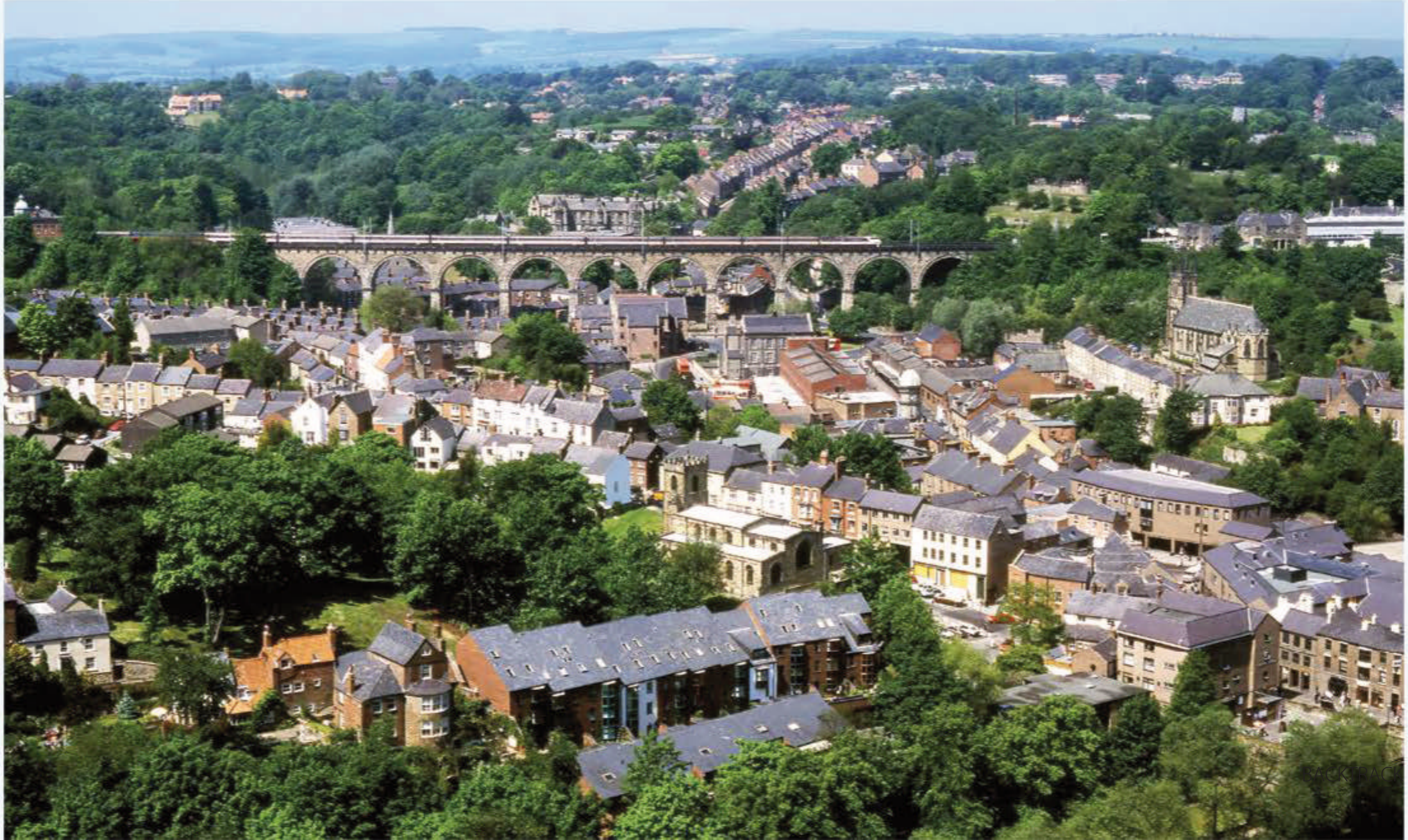
Carrying on from where we finished at York in the June issue, **GAVIN MORRISON**'s photographs lead us along the East Coast Main Line towards the end of the 'Flying Scotsman' service's route from London to Edinburgh.



ABOVE: **Well on the way... the halfway point is around twenty miles back as A4 Pacific No.60004 *William Whitelaw* passes Northallerton signal box viewed from the cab heading north on 19th September 1965. The modern signal box had been commissioned by the LNER on 3rd September 1939 – a date better remembered for much bigger events on the world stage!**

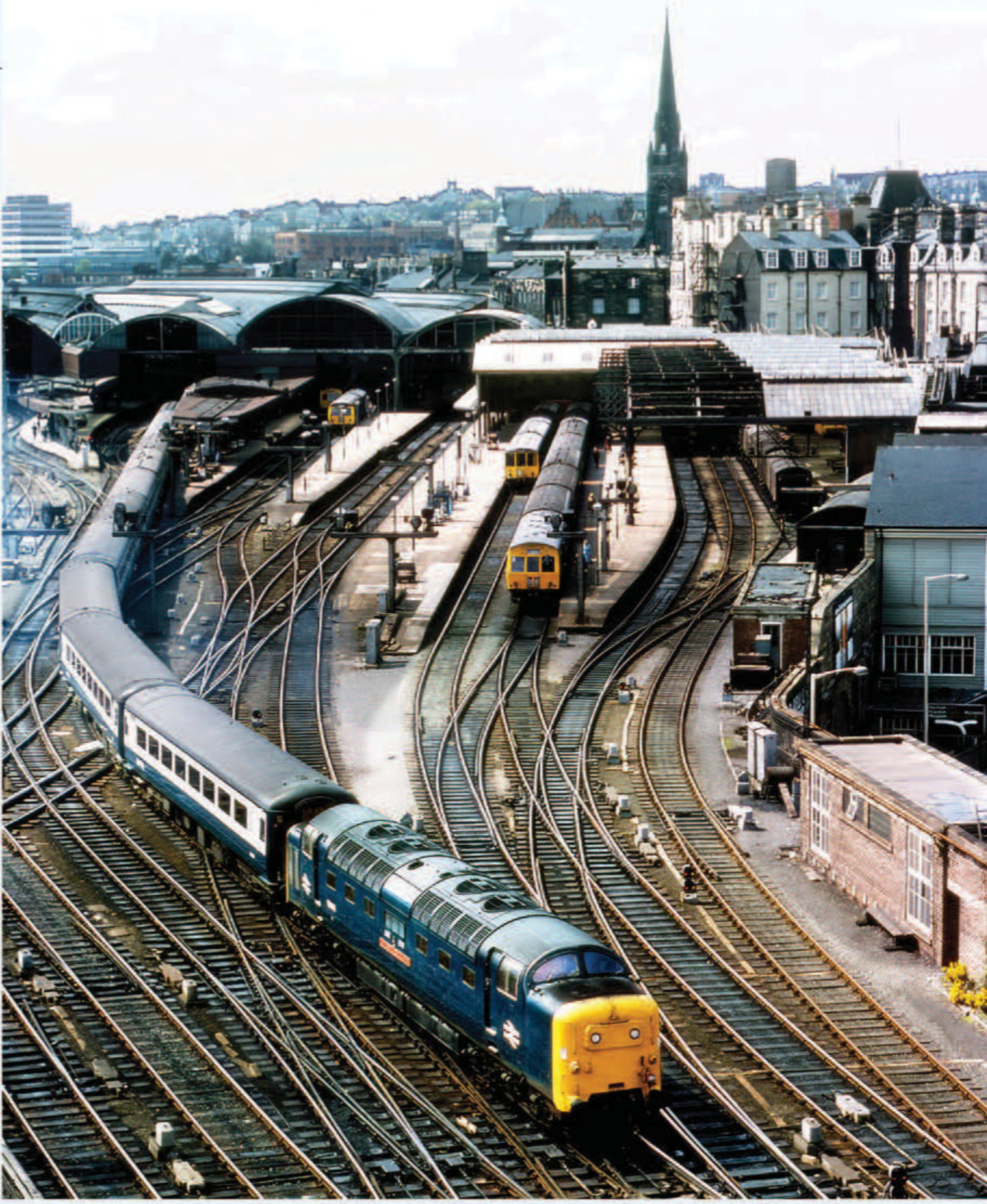


RIGHT: **Darlington station on 12th January 1957. LNER A3 4-6-2 No.60084 *Trigo* is on the 'Queen of Scots' Pullman from Glasgow to King's Cross as the crew of an L1 2-6-4T look on maybe enviously while a capped and scarfed schoolboy runs to get a good 'cop'.**

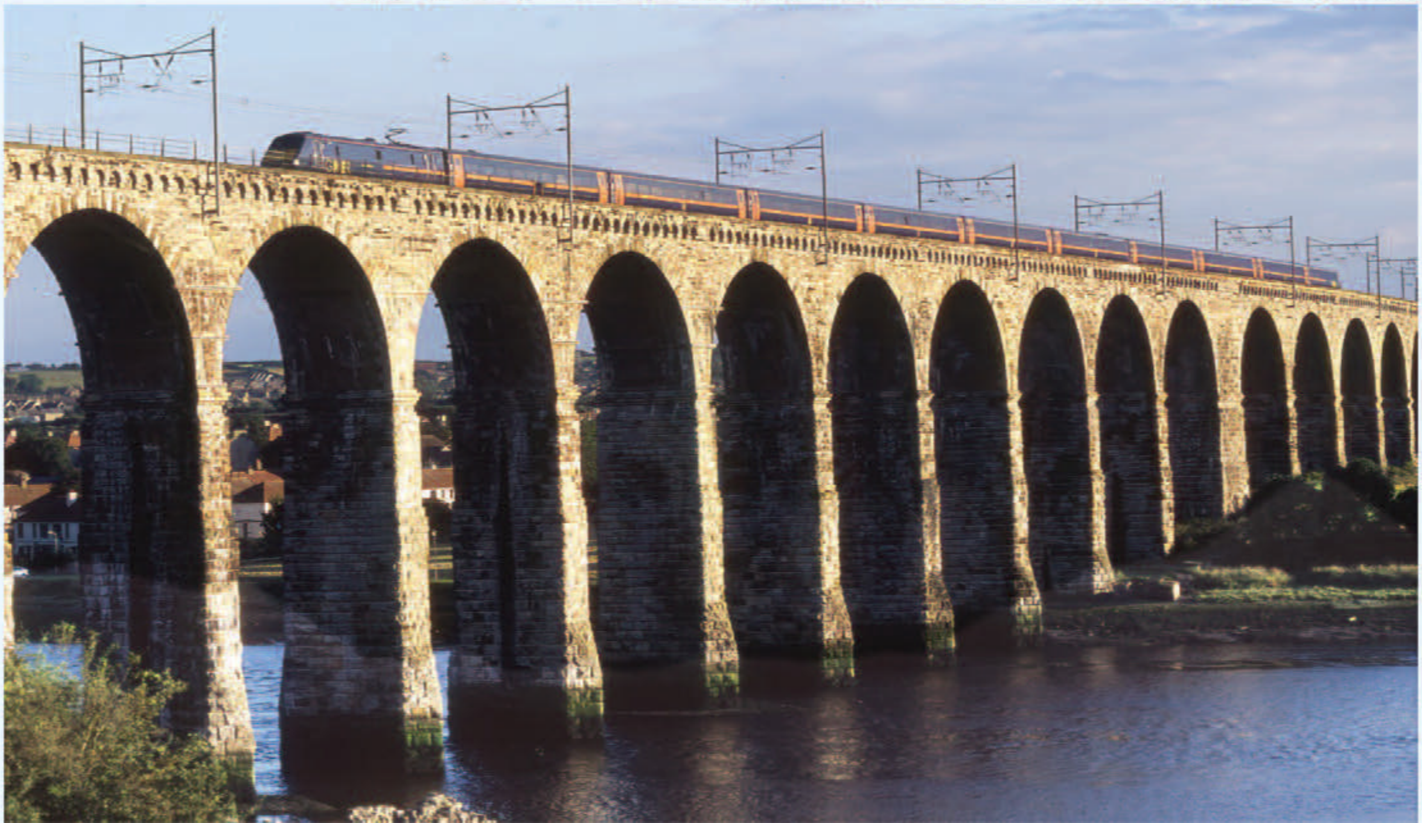


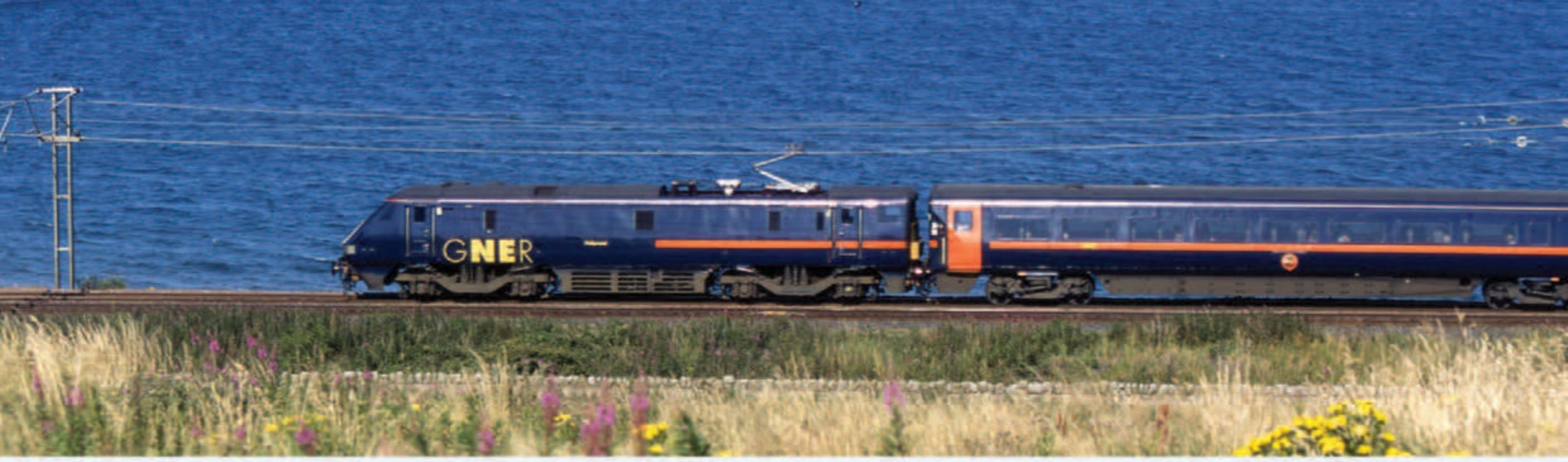
BELOW: **Durham Viaduct is a notable landmark, striding above the city and affording a good view of the cathedral. A Class 91 goes north on 4th June 1997.**

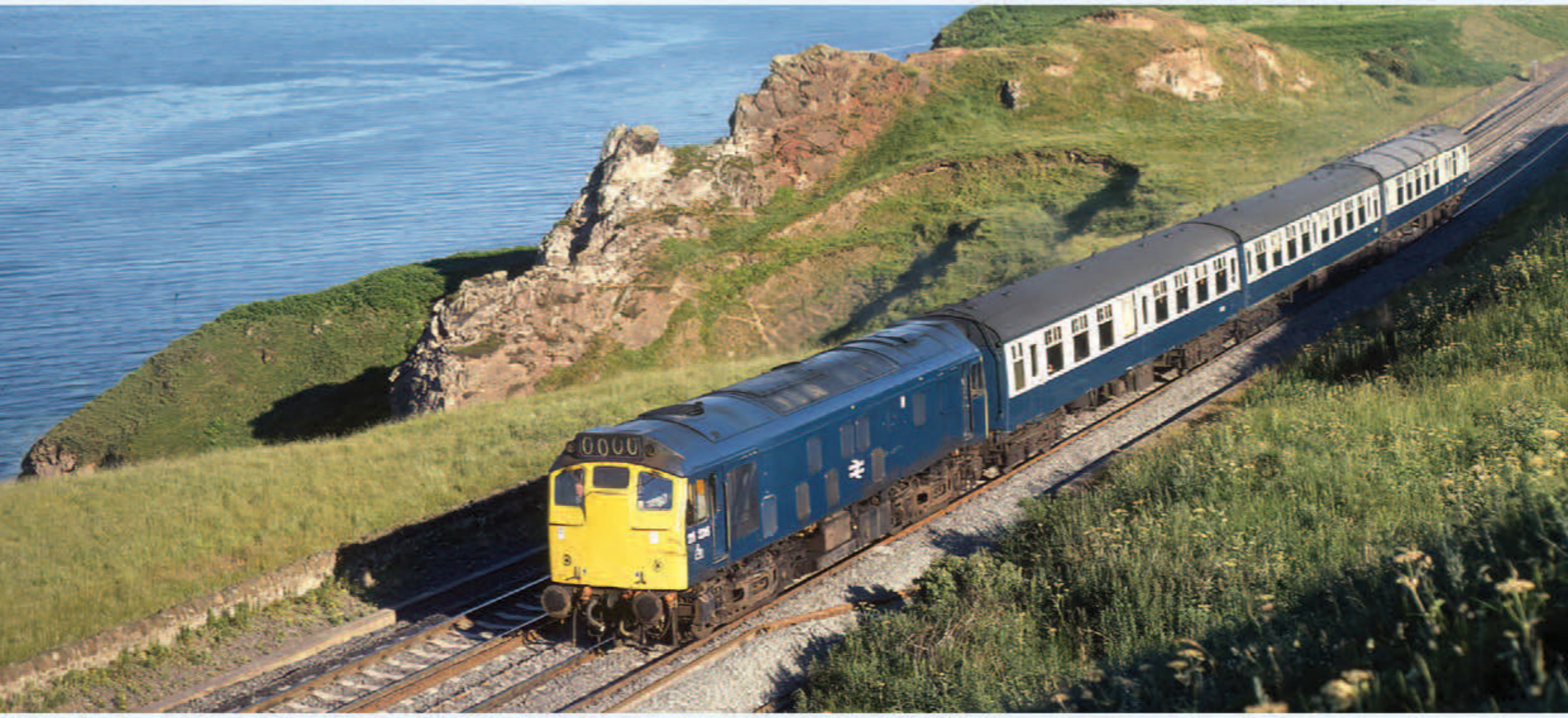
RIGHT: **The classic view of the railway from the castle keep at Newcastle, looking down on the diamond crossings where the tracks to the High Level Bridge, towards the left of the picture, leave the main line heading north in the foreground. Leaving Newcastle Central station on the 'Flying Scotsman' itself is 'Deltic' No.55 016 *Gordon Highlander* on 14th May 1977. A much simpler track layout now exists and the suburban bay platforms on the right have now been converted for car parking.**

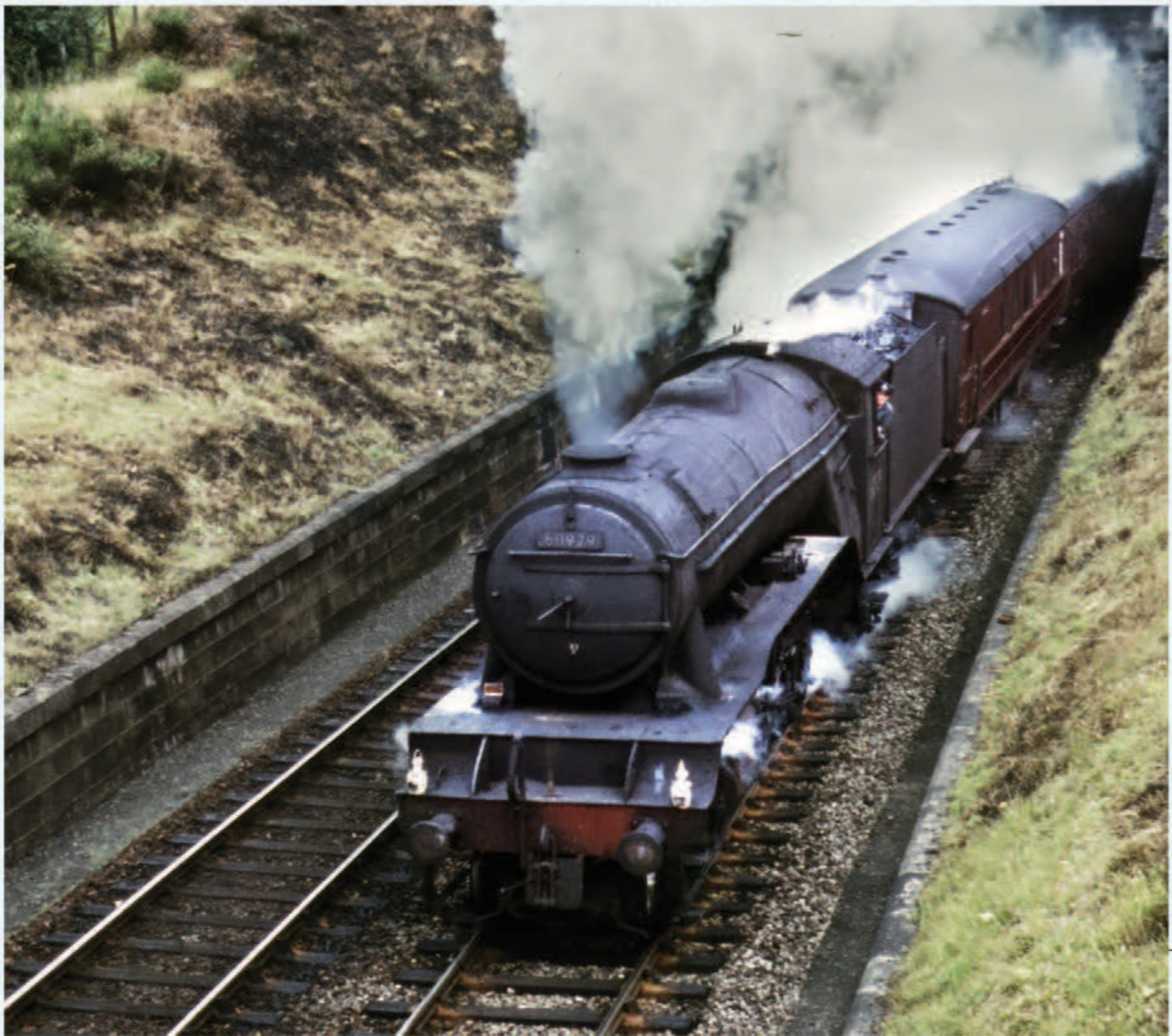


BELOW: **One of the finest railway structures in Britain carries the ECML across the River Tweed at Berwick on the Royal Border Bridge, 28 spans at a maximum height of 120ft. For all its name this is not, of course, the actual 'border' – we shall come to that shortly! On its way south on 9th August 2007 is Class 91 No.91 109 with an up express in GNER 'stealth bomber' livery.**





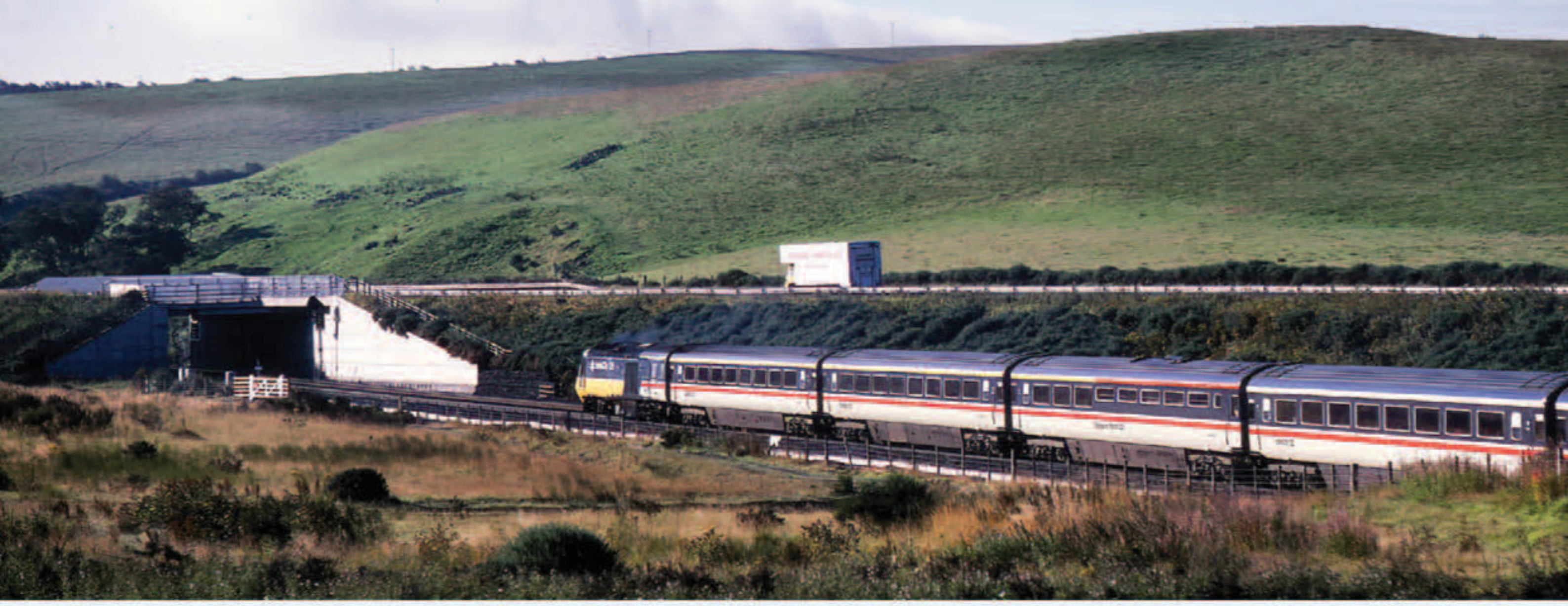




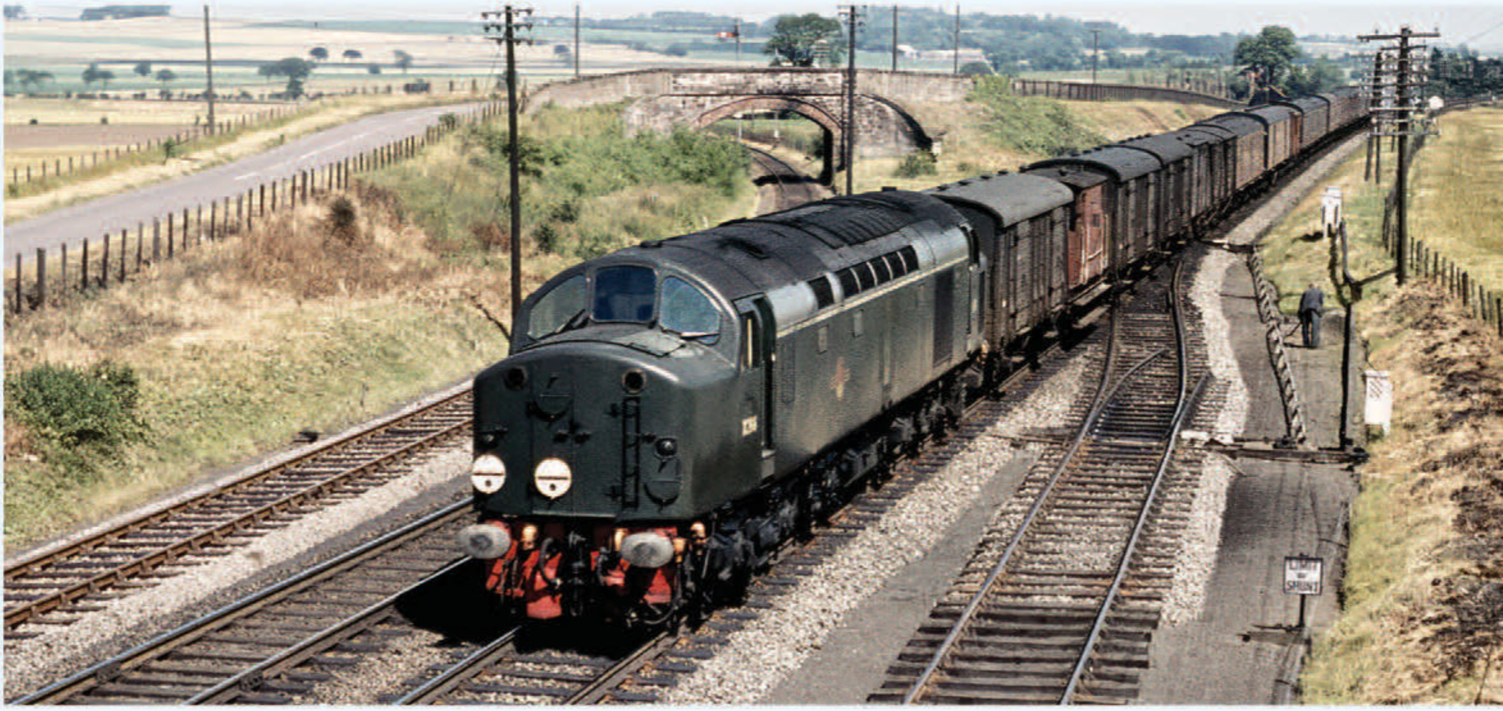
TOP: **The choicest scenery on the ECML is to be enjoyed when the railway runs along the cliffs above the North Sea. South of Berwick at Spittal No.91 115 is on the rear of the 15.01 Edinburgh–King's Cross on 9th August 2007.**

ABOVE: **A couple of miles north of Berwick at Marshall Meadows is the border between England and Scotland. The sea isn't always this blue, of course, but on 28th June 1976 Class 25 No.25 226 and a Berwick–Edinburgh local are in luck.**

LEFT: **LNER V2 2-6-2 No.60929 emerges from the south end of Penmanshiel Tunnel with an up express north of Grantshouse near the end of Cockburnspath bank on 15th July 1961. In March 1979 tragedy struck during work to lower the track bed when there was a partial collapse of the roof, claiming the lives of two workmen.**

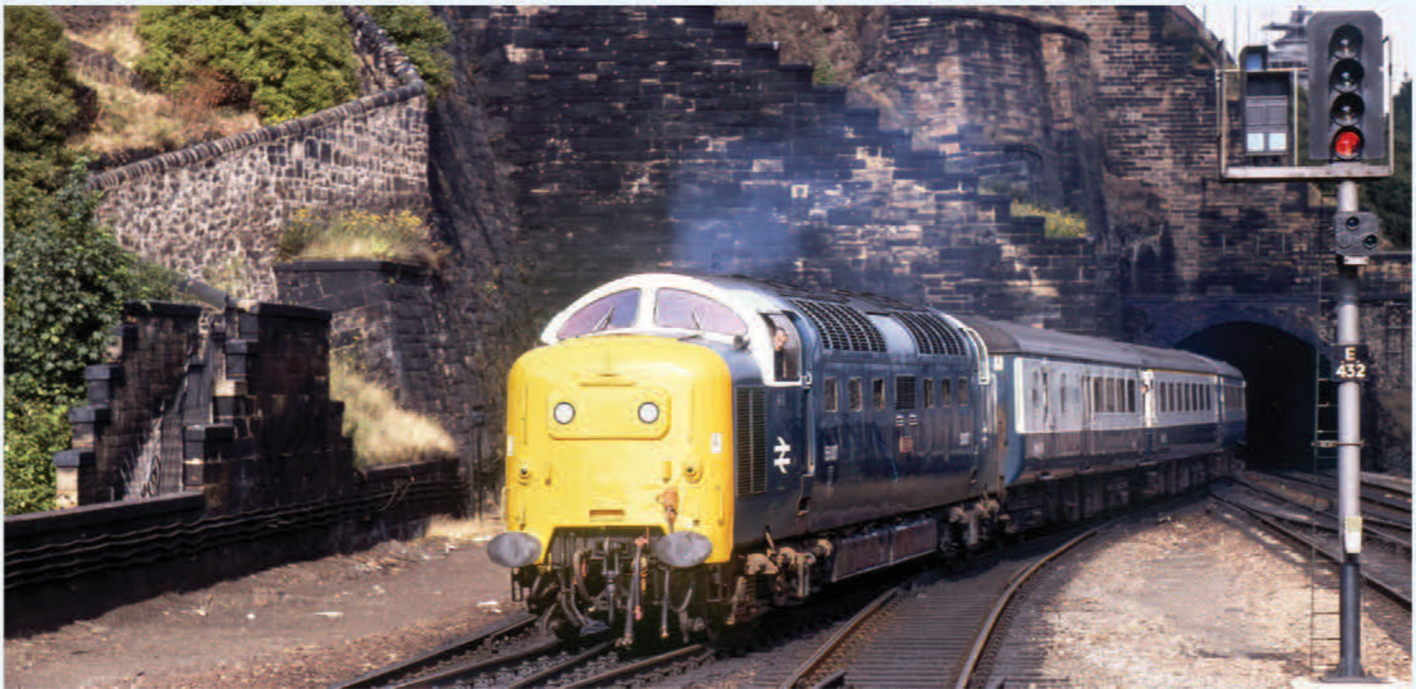


ABOVE:: **The collapse of Penmanshiel Tunnel led to its abandonment and the construction of a new deviation for the railway and a consequent realignment of the A1. Reopening of the railway was achieved in a remarkable six months and a full account can be found in *BT* 13/8, August 1999. On 16th September 1987 an HST heads south as a removal van makes its steady way along the A1.**



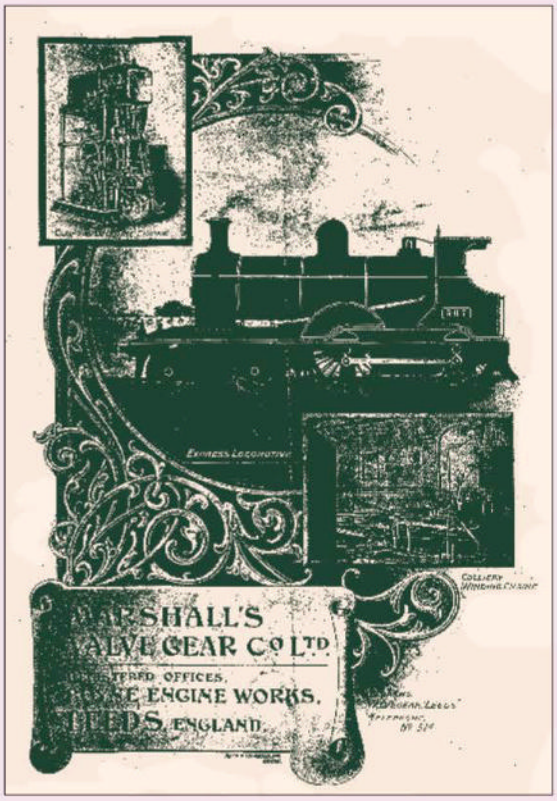
ABOVE: **Around 17½ miles south of Edinburgh a branch diverges to North Berwick at Drem and passing the junction on 14th July 1961 is English Electric Type 4 (Class 40) No.D266 with a down parcels express. Spot, if you can, the permanent way worker scarcely visible on the right – illustrating why high-visibilty clothing was such a beneficial safety development.**

BELOW: **Arriving at Edinburgh – during the closure enforced by the Penmanshiel Tunnel collapse a shuttle service was maintained between Edinburgh Waverley and Dunbar. 'Deltic' No.55 007 *Pinza* leaves Calton Tunnel approaching Waverley station on 4th August 1979.**



LOCOMOTIVE SKULDUG
THE CASE OF THE COPYCA

Investigated by **PHILIP ATKINS**


MARSHALL'S
VALVE GEAR Co LTD.
REGISTERED OFFICES.
BOYNE ENGINE WORKS.
LEEDS, ENGLAND.
Express Locomotive
Colliery Winding Engine
Telephone No 514

Cover of promotional brochure for Marshall's Valve Gear Company Ltd.

"We are on the eve of a mechanical revolution such as has never been seen since the introduction of steam.".So reported *The Times,* no less, following a grandiose statement that was made by a local Member of Parliament at the annual dinner of the Leeds Association of Engineers on 8th December 1901. This was with respect to a new locomotive valve gear, recently devised in Leeds by one James Marshall, which was currently on trial on the Great Northern Railway.[1]

The Stephenson and Walschaerts valve gears, both incorporating eccentrics, dominated British steam locomotive practice in the twentieth century. Statistically speaking, ranking a poor third during this period was the eccentric-free Joy gear. This was last fitted new to the Beames 0-8-4 tank locomotives built at Crewe in 1923, but it only finally became extinct on British Railways 41 years later. Limited alternative applications of various theoretically more efficient poppet valve gears made very little practical impact. Meanwhile three valve gears, which were each devised in Yorkshire, underwent a number of extremely limited and brief main line trials in the British Isles between 1902 and 1934. The first and second of these valve gears were the subject of mutual litigation in 1909, while the third would operate complete for scarcely two months 25 years later on the Southern Railway.

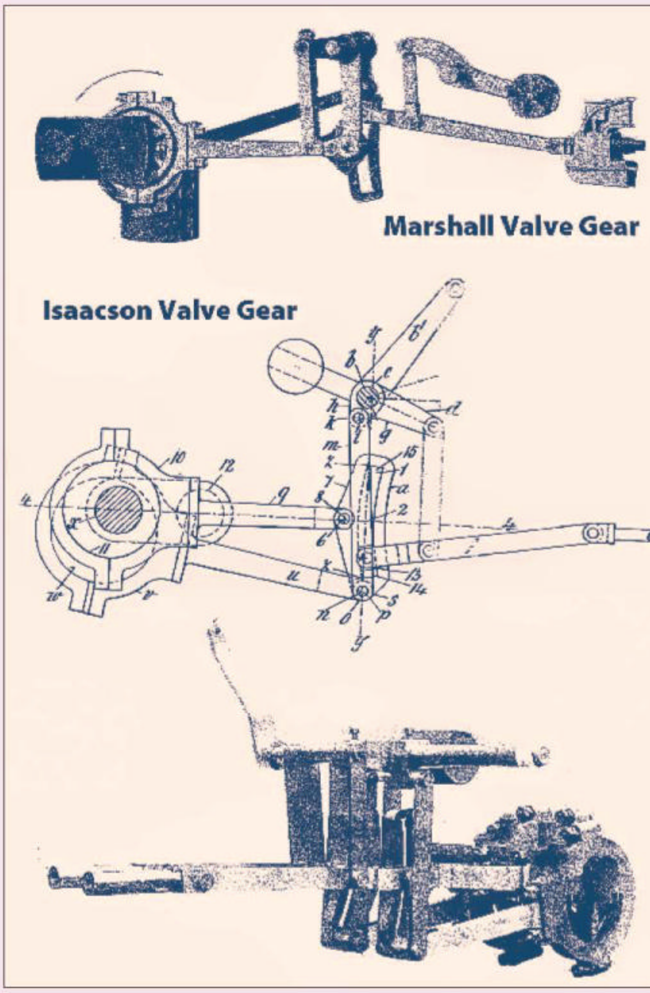
James Thompson Marshall was born in Wragby in Lincolnshire in 1855, and although not a son of, he was related to William Marshall, who had recently founded the eponymous firm of agricultural engineers in Gainsborough in the same county. Another relative, F. C. Marshall, patented a valve gear in 1879 which was sometimes employed on industrial and narrow gauge locomotives. This was illustrated in T. H. Shields's monumental survey of locomotive valve gears.[2] James Marshall served a seven-year apprenticeship at the family firm in Gainsborough, before joining the Steam Plough Works of John Fowler & Co., in the Hunslet district of Leeds. This enterprise directly adjoined the Airedale Foundry of Kitson & Co., a major commercial builder of main line locomotives, which included many of these for export. Marshall later moved on to the neighbouring Boyne Engine Works of Manning Wardle & Co.

A partner at Fowler's since 1866, when that company also began to build locomotives, was Reginald Wigram (born 1843) who had marine engineering experience and who had also spent some time at Crewe Works. Since 1887 he had also been a director of the Great Northern Railway, and was chairman of its Locomotive Committee in 1901.[3] In 1899 James Marshall was granted a patent for a valve gear applicable to stationary steam engines and only two years later he and Wigram were jointly granted another related patent.[4] This in turn was very swiftly followed by yet another, in Marshall's name only, that had distinct locomotive applications, with the main aim of securing more rapid port opening and closure.[5] This was first fitted to a twenty-year-old Patrick Stirling 0-6-0, Great Northern Railway No.743, in October 1901 which, when pitted against a sister engine still in its original form in May 1902, demonstrated a considerable increase in haulage capacity or reduced coal consumption with a given loading. (Strangely, however, according to the local press, overnight attempts were made to sabotage the trials by someone surreptitiously setting the wagon brakes, an act that had initially passed unnoticed.)[6] Only three months later, the valve gear on No. 743 reverted to standard, by which time another set of Marshall valve gear had already been fitted to Ivatt 4-4-0 GNR No.1331 (built 1898) in March 1902, only to be removed likewise during the following August. The same equipment was possibly later refitted in March 1903 to Ivatt 4-4-2T GNR No.1520 on which the experiment this time lasted somewhat longer, until April 1907. In 1905 Midland Railway 4-4-0 No..232 was fitted with Marshall valve gear between 1905 and 1907.

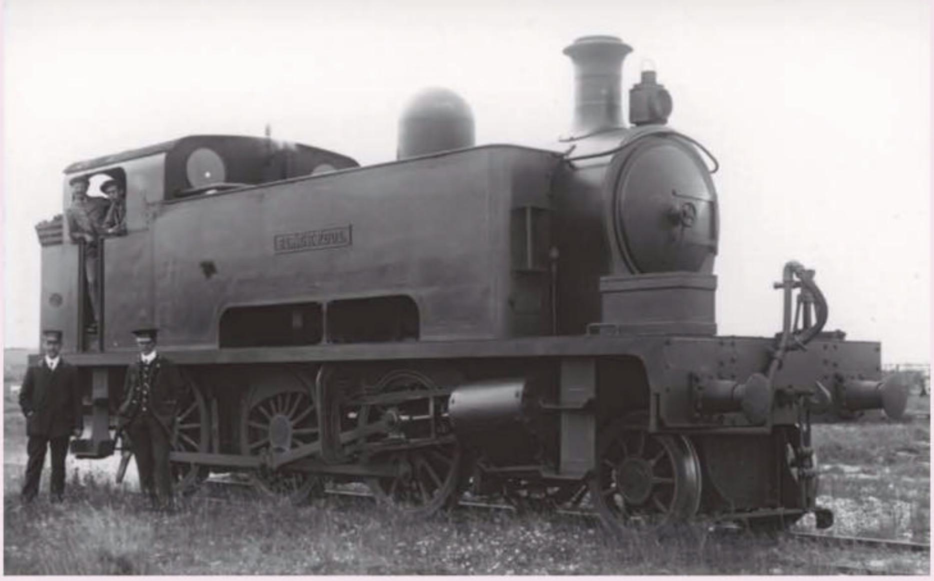
In March 1902 at the end of the Webb era, via its valve gear machine, Crewe drawing office investigated rebuilding the only recent London & North Western Railway four-cylinder compound 4-4-0s with Marshall valve gear. However, it opted instead to provide independent sets of Joy valve gear to the high and low pressure cylinders.

The most intensive tests, however, took place in Ireland, on the Great Southern & Western Railway between Dublin and Cork. Marshall's valve gear was manufactured in Leeds by Marshall's own Valve Gear Company, at the Boyne Engine Works of Manning Wardle & Co. A lavish brochure extolling its virtues carried a photograph of GS&WR 4-4-0 No.307 on its cover. The tests with this engine, at which both Robert Coey (Ulster-born as Cowie), the locomotive superintendent, and Richard Maunsell, his works manager at Inchicore Works, were present, together with James Marshall riding on the footplate, were reported replete with indicator diagrams in *The Engineer.*[7] When running between Dublin and Kildare, which represented a steady climb over 27 miles, No.307 averaged 60.5mph, hitting a

Comparative illustrations of Marshall's and Isaacson's locomotive valve gears.



GERY IN LEEDS
T VALVE GEARS



Knott End Railway 2-6-0T *Blackpool* as built. (T. J. Edgington Collection)

maximum of 75mph. This compared with only 49.2mph and 70mph respectively by ‘control’ No 305 with a similar loading. Notwithstanding, the former lost its Marshall valve gear when rebuilt at Inchicore not long afterwards with a new (round-topped) taper boiler in 1907.

Marshall was awarded another patent in 1906 which incorporated further refinements to his 1901 locomotive valve gear.[8,9] Probably the only recipient of this was Lancashire, Derbyshire & East Coast Railway Class A goods 0-6-2T No.26, when this was fitted in place of its standard Allan straight link valve gear, also in 1906. Soon afterwards, in the final months of the LDECR’s independent existence, in place of the hitherto customary pair of 0-6-2Ts, unpiloted No.26 worked the LNWR Royal Train from Tuxford to Ollerton, conveying King Edward VII after his annual attendance at Doncaster Races in September 1906. By this period the company’s locomotives were being outshopped in plain black, but for the occasion No.26 was turned out in fully lined black livery and had almost certainly just been rebuilt with a replacement Belpaire boiler at the same time. In recent years several LDECR locomotives had been sent ‘outside’ for heavy repairs, including to the Stratford Works of the Great Eastern Railway, with which the ‘East to West’ had close commercial associations.[10] Interestingly, seven tracings, including one for the said Marshall valve gear, and for both types of boiler fitted on the 0-6-2Ts, were incorporated in the Stratford drawing sequence in November 1906, which now survive amidst many other Stratford GER drawings at the National Railway Museum in York.[11] This would strongly suggest that this particular rebuild was undertaken in east London. Tests conducted with No.26 confirmed a significant increase in its haulage capacity, putting it on a par with the larger recently acquired Class D 0-6-4Ts (1904), ie 45 as against 37 10-ton coal wagons. However, the takeover of the LDECR company by the Great Central Railway in January 1907 would have quickly stifled any further applications and the engine would soon have reverted to standard.

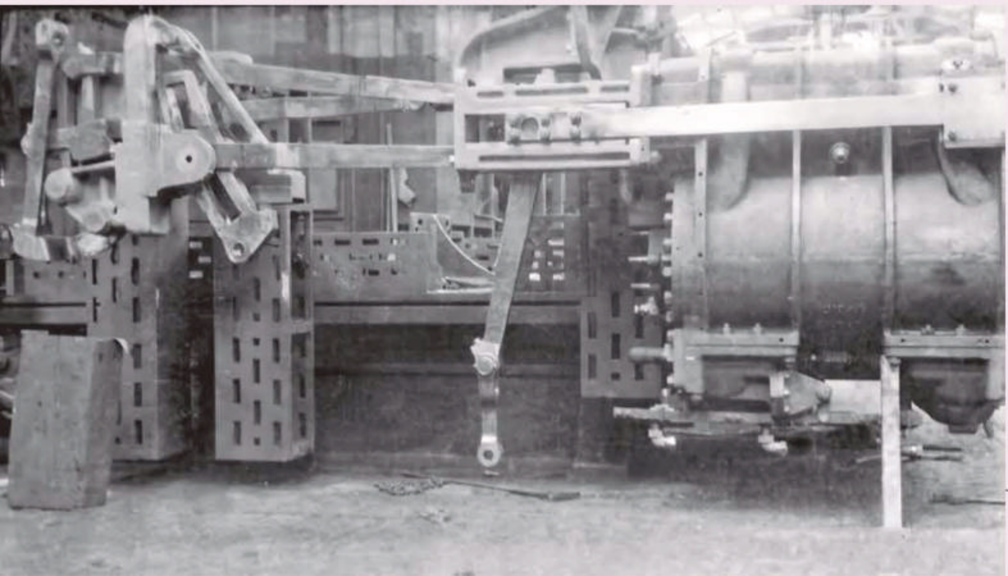
So much for the brave words that had been uttered in Leeds back in December 1901. For all Marshall’s efforts total applications of his valve gear, ephemeral at that, had numbered no more than ten, but worse was still to come. In December 1907 another engineer then in Leeds, Rupert John Isaacson (who originally hailed from the Isle of Wight) filed a patent for a similar valve gear with precisely the same characteristics of rapid port opening and closure.[12] Several other diverse patents in Isaacson’s name testify to him having been an inventive genius, but his valve gear on close examination was very far from being original and one wonders how it ever came to be accepted in its own right by the Patent Office in August 1908. Interestingly, although J. T. Marshall’s 1901 locomotive valve gear was duly mentioned and illustrated in T. H. Shields’s survey, this contained no reference to its more numerous Isaacson counterpart.

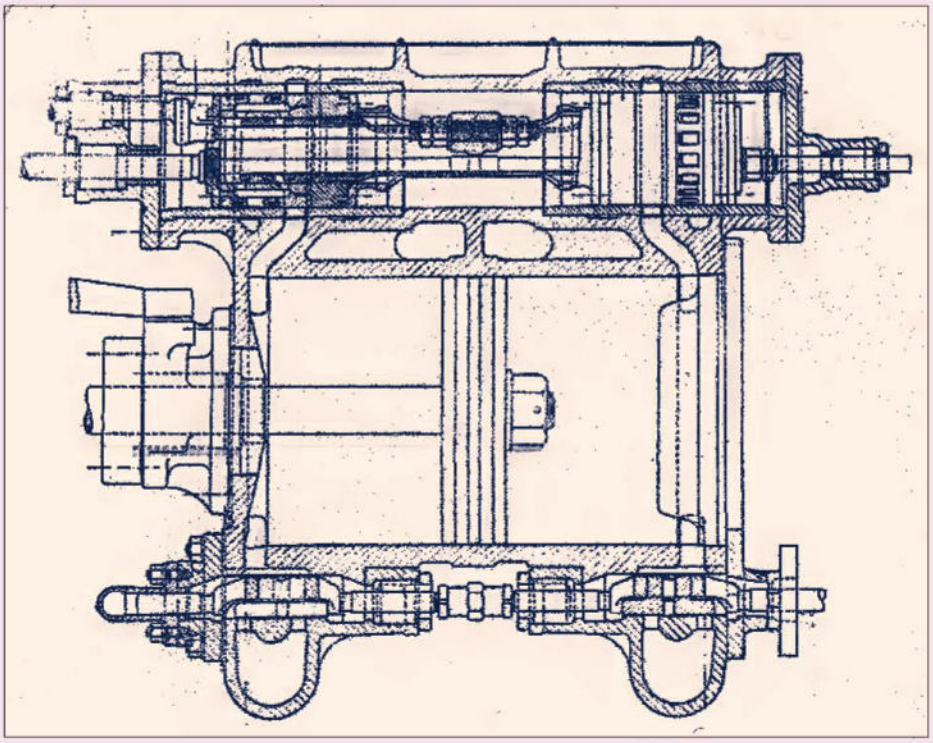
As if to add insult to injury, Isaacson’s patent specification listed no fewer than five other co-patentees, who would therefore stand to benefit from its application. These included none other than Edwin Wardle, the managing director of Manning Wardle & Co.! Furthermore, although individually unidentifiable, three of these were already Marshall’s co-directors on the board of his own valve gear enterprise.[13]

As its managing director, Marshall held 42,900 shares, while his three co-directors held 28,000 shares between them. However, when he put it to them that they should sue Manning Wardle & Co. for infringement of his patent, they refused to support him in view of their own vested interests. Although the majority shareholder, Marshall held less than the requisite three-quarters of the total share issue as stipulated by the Companies Act, 1862. He nevertheless went ahead to plead his case alone in the High Court. This resulted in a highly unusual and contentious situation whereby he was in effect suing his own co-directors! Remarkably, despite its anachronistic nature, to this day Marshall’s Valve Gear Company Ltd. v Manning Wardle & Co. (1909) remains a test case in regard to commercial legislation.[14] Marshall lost his case and, although still only in his fifties, he seemingly took early retirement. He thereupon moved to nearby Harrogate, where we shall nevertheless meet him again more than a decade later, and with regard to yet another valve gear.

Meanwhile, while directly also under the effective aegis of Manning Wardle & Co., Isaacson’s valve gear fared rather better, although it has to be said that the great majority of the 60-odd known applications featured on its own products. These were almost all 0-4-0 and 0-6-0 tank engines, some of them for export, built between 1907 and 1915, of which 54 have been identified. One notable exception was the unusual 2-6-0T *Blackpool* (designated ‘special’ by its builders) supplied to the short Knott End Railway in Lancashire in 1909. This is known, however, later to have exchanged its Isaacson valve gear for Stephenson link motion, for unknown reasons when back at the makers for heavy repairs in 1921.[15] Isaacson gear was also fitted to a few new builds by other manufacturers. These included two double-framed 0-6-0s from Beyer, Peacock & Co. for the Stratford-upon-Avon & Midland Junction Railway in 1908/9. These engines initially proved to be extremely unsatisfactory, but after

Photograph of cylinder casting and Marshall valve gear on a test rig in Leeds in 1933.





A retrospective highly detailed description of the cylinders and valve gear uniquely fitted to SR No.1850 was published in *The Locomotive* for January 1939. A curious aspect of this account was that the esteemed journal placed the date of this experiment as having been "a year or two" after the patent had been granted to J. T. Marshall in 1926. This cylinder drawing is taken from the article which did not attribute any source.

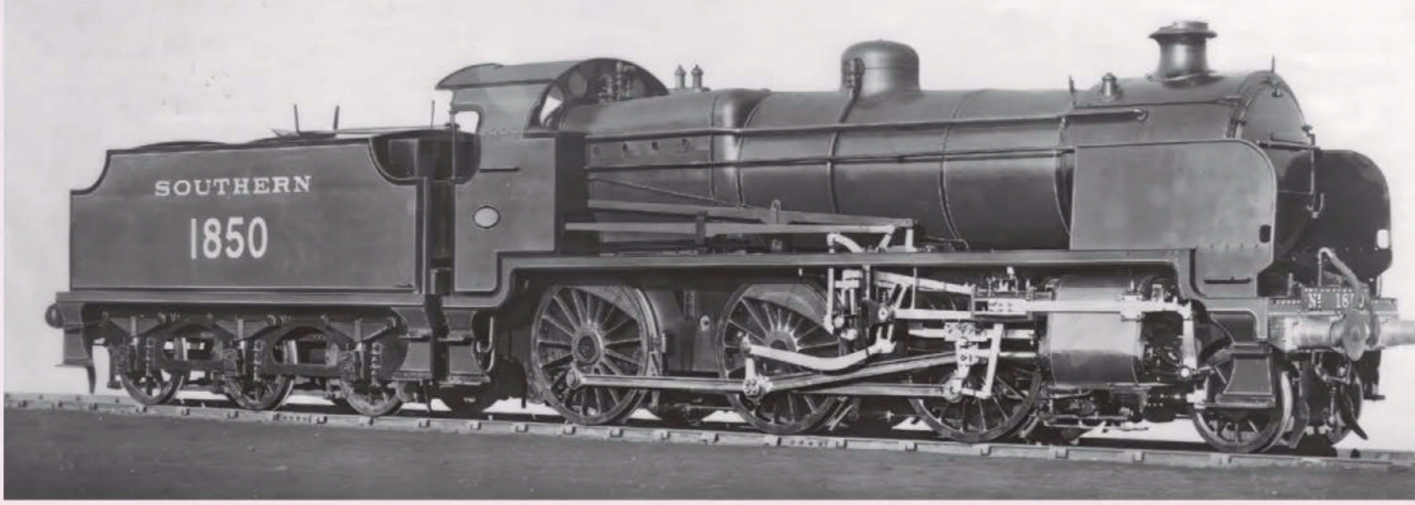
modification returned a 15 per cent economy in fuel consumption, following which an earlier similar engine was also thus fitted. In early 1911 Midland Railway Johnson No.382 was rebuilt with a G7 Belpaire boiler and Isaacson valve gear, and tested against otherwise identical sister engines No 379 with 'Standard' Stephenson valve gear and No.387 with what was described as 'New' Stephenson gear.[16] Coal consumption for all three engines proved to be almost identical at 35.0, 34.8, and 35.3lb per train mile respectively. Isaacson valve gear was also possibly fitted to a Great Eastern 2-4-2T c1909.

Robert Coey, after retiring from Inchicore in mid-1911, immediately moved with his family to Scarborough, having strong family ties in Yorkshire. In 1919 they lived for a year in Switzerland, before moving on to Rome, where they remained for three years. They then returned to Yorkshire, this time Harrogate, where Coey's daughter Maud had attended the Ladies' College there. The Coey family now came to live not only very close to the college, but also by a strange coincidence within a few hundred yards of James Marshall's residence, which is still named Penrith Gate, in the desirable Duchy Estate area of the Yorkshire spa town. Whether the two retired locomotive engineers ever encountered each other again thereabouts is not known. For her part, Maud lived in the town until her death when aged 91 at the end of 1993, nearly 60 years after that of her father there in August 1934. To the end she still retained clear memories of Richard Maunsell in Dublin pre-1914, but apparently had no recollection of James Marshall in Harrogate.[17]

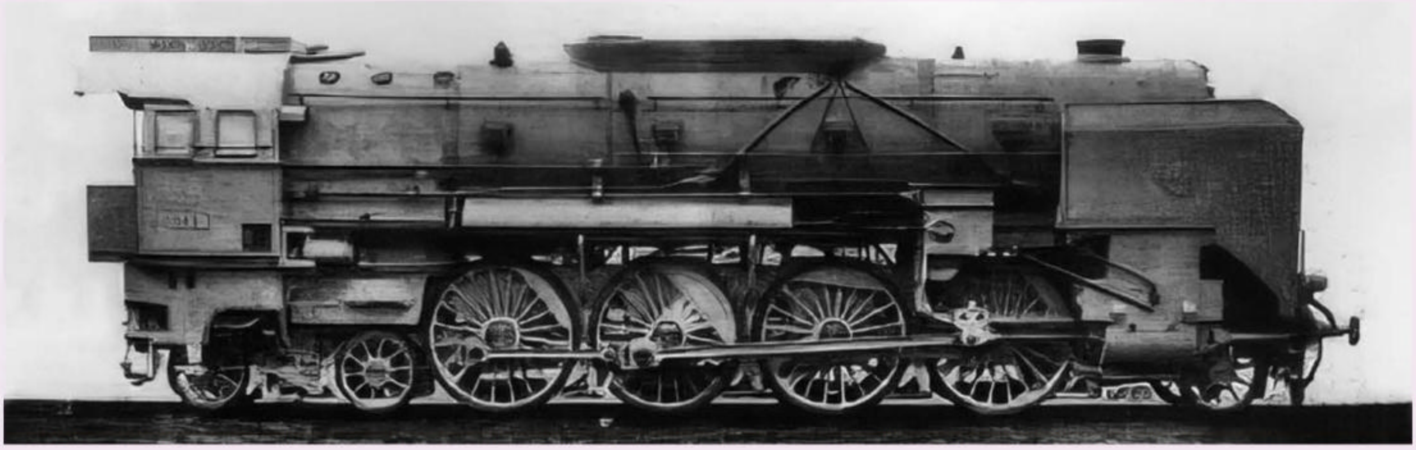
For his part, Marshall in retirement had by no means lost his interest in valve gears, of which he proceeded to devise another. At around the age of 70 he applied for a patent for such in May 1925, which was accepted in August 1926.[18] Its novelty was due to the inherent limitations of all previous radial valve gears whereby the admission of steam into and its subsequent exhaust from a locomotive cylinder was inextricably linked. At the inevitable expense of greater complexity, Marshall's new valve gear now made for these events to be independent of each other via separate steam ports, with each provided with its own valve and valve gear, which could be independently controlled by separate reversing mechanisms. This thereby reduced back pressure and consequently improved locomotive performance. Following James Marshall's death at his home in December 1931, his obituaries reported that the greater part of his retirement had been spent on "an invention of steam engine valve gear which was completed and tested at Gainsborough three years ago".

Against all the odds this new valve gear actually made a posthumous, if only extremely brief, appearance on a locomotive. According to Donald Bradley, in his definitive account of the various Maunsell 2-6-0 classes, shortly before his death Marshall had made a direct approach in early January 1931 to his former acquaintance in Ireland and now the Chief Mechanocal Engineer of the Southern Railway, Richard Maunsell, who swiftly approved its trial only three weeks later.[19]

Although not mentioned by Bradley, the project was bankrolled by one Walter Tarrant, via an Agreement dated April 1933, with Mrs. Jane Marshall and the Southern Railway Company, regarding the supply of plans of and for the use of Marshall valve gear by the SR.[20] Walter George Tarrant (1875-1942) was in fact a prominent self-made master builder in the Home Counties, who amongst many achievements created the exclusive St. George's Hill estate in Surrey and who also manufactured aircraft during the First World War. [21] Bradley averred that the various parts and drawings for the experiment all arrived at Eastleigh Works in September 1933. Not least in relation to the date of the Agreement, the actual sequence of events of this experiment is puzzling. In fact, all the relevant drawings were logged in the



Southern Railway Class N 2-6-0 No.1850 as fitted with new cylinders and the final Marshall valve gear in February 1934. (John Alsop Collection)



Builder's official portrait of OBB three-cylinder 2-8-4 No.114.01 (1929).

Eastleigh drawing register, now held in the archives of the National Railway Museum at York, somewhat earlier at various dates between May and November 1932. The entry for the all important cylinder casting was dated 27th May. However, these entries were not accompanied by the customary initials of any of the of the regular drawing office staff. Therefore the identity of their external origin remains uncertain.

Meanwhile, recently a very interesting photograph came to light, reproduced herewith, that originated from Kitson & Co. in Leeds. This shows the distinctive right-hand cylinder casting mounted on a test rig, together with a still incomplete set of its double (Walschaerts) valve gear. By 1933 Kitson & Co. was in serious decline and the following year was taken into receivership. For many years the casting of locomotive cylinders, sometimes even for other locomotive builders and also railway workshops, had been a particular speciality of the Airedale Foundry. It is reasonable to presume that the valve gear parts were also manufactured there. By something of an ironic twist several years earlier, Kitson & Co. had purchased the goodwill of Manning Wardle & Co., following that firm's failure in 1926 and subsequently manufactured a number of locomotives of its design up to 1938.

Class N 2-6-0 No.1850, one of the 50 engines of its class that had been purchased by the Southern Railway from Woolwich Arsenal, which were consequently popularly referred to as the 'Woolworths', was selected to be the 'guinea pig'. The conversion was undertaken at Eastleigh Works between mid-October 1933 and the beginning of March 1934.

Comparative tests were conducted against standard Class N No.1413. Thomas Brocklebank, the retired one-time chief draughtsman and latterly managing director of Kitson & Co., who for a very long time would have been personally acquainted with James Marshall and his wife, acted as an observer on behalf of Mrs. Marshall. Unfortunately, in his memoirs *(Locomotive Adventure, Vol.2* (Ian Allan, 1965), Maunsell's former technical assistant, Harry Holcroft, uncharacteristically made only the briefest reference to this particular experiment, which was but one of several involving the N Class. However, Bradley stated that at modest speeds the Marshall valve gear performed well and demonstrated a marked fuel economy when compared to its sibling. However, above a speed of 50mph what must have been a rather disturbing knock developed. Indeed, after only seven weeks, while working a passenger train from Waterloo on 22nd March, the right-hand valve gear disintegrated completely near Woking owing to the heavier stresses imposed on the standard return crank. So brief was this experiment that it completely escaped the notice of the railway press, including the *Railway Observer*. Merely three weeks later the engine emerged from Brighton Works restored to its original configuration. This otherwise unremarkable 2-6-0 would thereafter remain in traffic for almost another 30 years, prior to its withdrawal as British Railways No.31850 in January 1964.

Postscript – a minor Marshall mystery

One example of a Marshall valve gear apparently operated for considerably longer on a locomotive in Continental Europe! In early 1929 two large 2-8-4 express locomotives were completed by rival locomotive builders in Vienna and Wiener Neustadt for the Austrian Federal Railways (OBB). They differed significantly from each other only in that one had two and the other three cylinders. On the two-cylinder engine steam distribution was via Walschaerts valve gear and Lentz poppet valves, but on the three-cylinder engine this was achieved by some other means. The precise nature of its valve gear remains unclear, as it was only simply referred to as being *nach* (after) *Marshall,* in the otherwise detailed description of the engine, OBB No.114.01, in the May 1929 issue of *Die Lokomotive,* published in Vienna.

Elsewhere it has been stated to have been a rotary valve gear and therefore may have harked back to an early Marshall patent devised for application to stationary steam engines. Georg Sigl's locomotive building enterprise failed very shortly thereafter in what were difficult times. The simplicity of the alternative two-cylinder engine won out and the larger Vienna Locomotive Works would continue to build main line steam locomotives, including for export, for a further 30 years. Although merely twelve two-cylinder production 2-8-4s of OBB Class 214 were subsequently built for service in Austria itself, there followed no fewer than 79 more from two domestic builders in Romania which were constructed under licence for operation in that country. Except when it was brand new, the rarely photographed solitary three-cylinder variant in Austria would be the first of the 92 2-8-4s in question to be retired, in early 1953.

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13. R. J. Isaacson's co-patentees for his valve gear patent were: Horace Sanderson, Henry St. John Sanderson, Edwin Wardle, John Edwin Firth, and Charles Ernest Charlesworth. The Sanderson brothers and Edwin Wardle were also listed as co-patentees with Isaacson regarding the latter's patent granted in 1908 relating to a locomotive blastpipe.
14. A lengthy resumé of the complex court proceedings can be accessed on line at: https;//vlex.co.uk/vid/marshall-s-valve-gear-806057441
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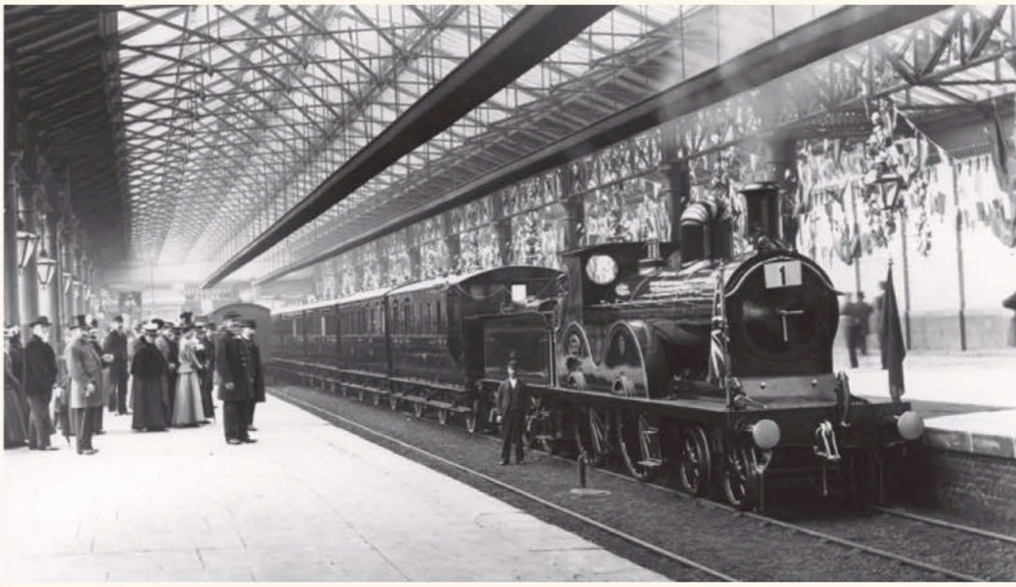
18. British Patent No.256,676 (1926)
19. D. L. Bradley, *The Locomotives of the South Eastern & Chatham Railway,* The Railway Correspondence & Travel Society, 2nd ed. 1980, p93
20. Agreement between Walter George Tarrant, the Southern Railway Company, and Mary Jane Marshall, for the supply of plans and use of Marshall valve gear, April 1933. National Archives, Kew, RAIL 647/34
21. Walter George Tarrant, Wikipaedia on line



Southport's Chapel Street station in all its finery in 1902 on the occasion of a visit by King Edward VII. The locomotive heading the Royal Train is LYR '1093' Class 4-4-0 No.1221. (Pendragon Collection)

SOUTHPORT REMEMBERED

MICHAEL H. C. BAKER shares some recollections from this Lancashire seaside town

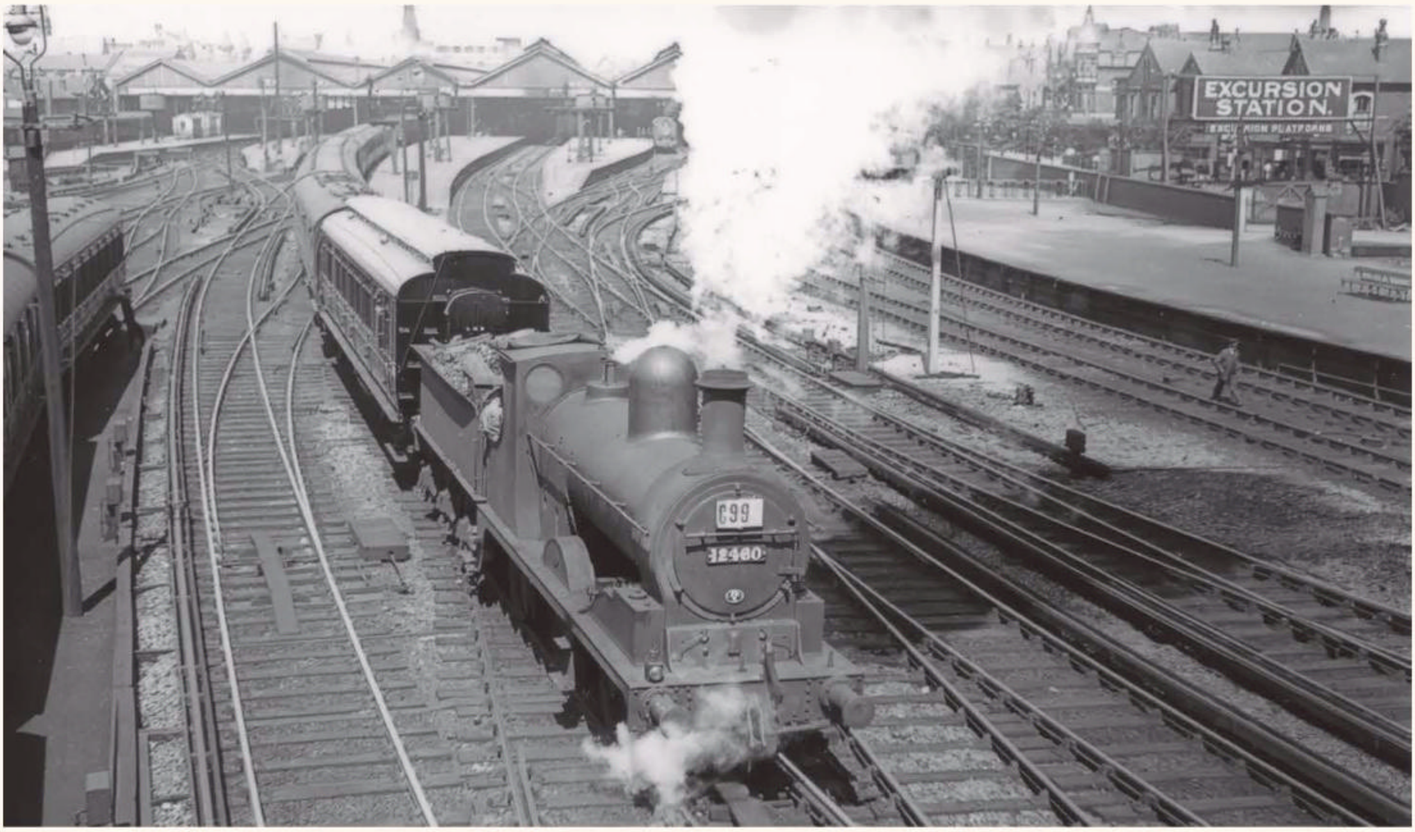
I had only once ever visited Southport until employment at the town's art college took me to live there in January 1964. I certainly knew it as being in the top two of Lancashire seaside resorts with all that implied in terms of railway provision. Therefore I was more than a little taken aback, on enquiring at Chapel Street, the principal of the many stations serving the town, just how many trains there were each day connecting it with London, to be told "Two". And later I discovered that these each consisted of a mere two carriages, attached to and from a Euston to Liverpool express at Edge Hill. But surely, I thought, so important a holiday resort warrants a regular service, if not an hourly one, of full length, direct connections with the capital? It was a vivid example of what is still a problem with we southerners, and not just those who sit at Westminster for south of England constituencies (eg the fate of HS2) that the further you get from London the less its presence impinges on the everyday lives of the citizens of the United Kingdom.

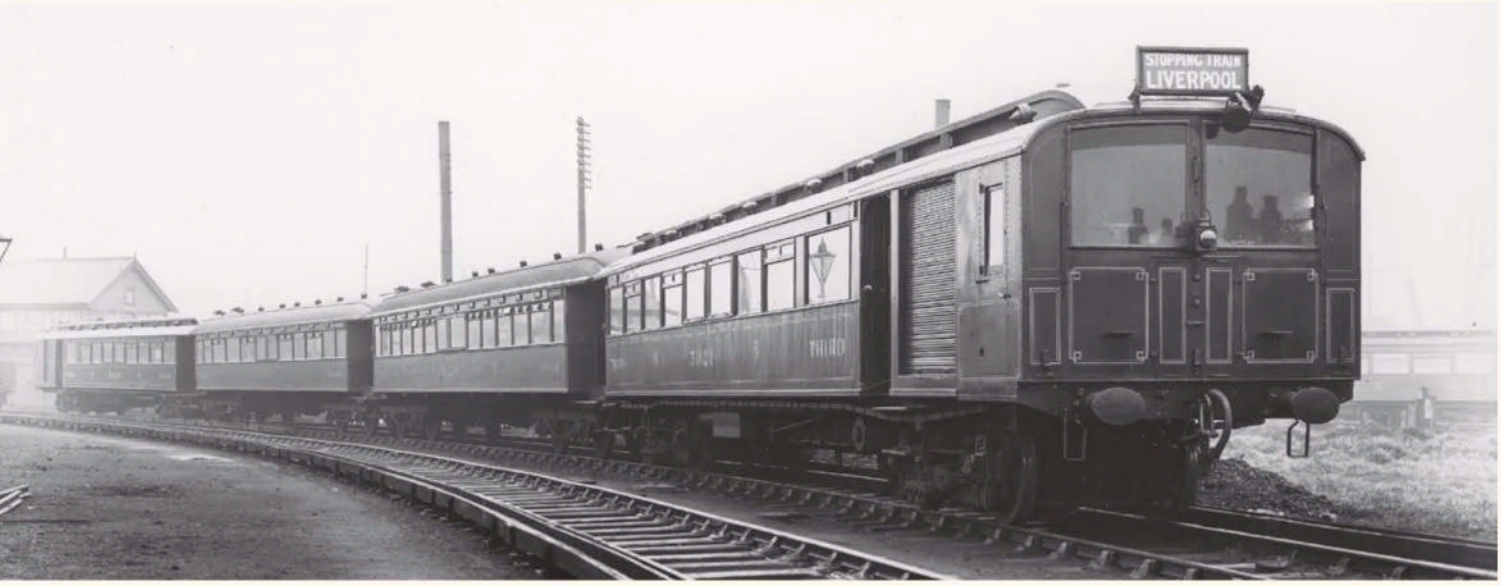
There were all sorts of places that did have regular, full length trains running to and from Southport, principally Manchester and Liverpool. It was perfectly possible to commute to both these latter and as for holiday traffic – well, Chapel Street station had additional platforms, beyond the main station, devoted entirely to this business, involving towns and cities all over Lancashire and Yorkshire, but certainly not London.

One of these was Preston. I knew that Preston was a very important railway centre on the West Coast Main Line but also the hub of many routes pointing in all the principal directions of the compass. I was lodging with a Mrs. Rigby, just down the road from the college, a pleasant lady of middle age with dyed purple hair and the mother of a just retired Olympic swimmer who, hearing of my interest in railways, said "You'd better take the train to Preston sharpish, they're about to shut the line." This was a shock for surely the line must generate much regular business?

I must correct myself in one respect for on one day of the year, just one, Southport played host to practically more trains to and from London than it could handle. Not that the locals benefited, unless they were trainspotters, for these trains did not actually call at any Southport station, merely passed through. This was Grand National day and many specials, after dropping off their passengers at Aintree, then proceeded on a circular route through much of south west Lancashire, passing within sight of Southport Chapel Street, but missing it out by means of a line not normally used to passenger

Ex-LYR Hughes 0-6-0 LMS No.12460 shunting coaching stock at Southport Chapel Street c1930. The London Street excursion platforms are over to the right. (Author's Collection)





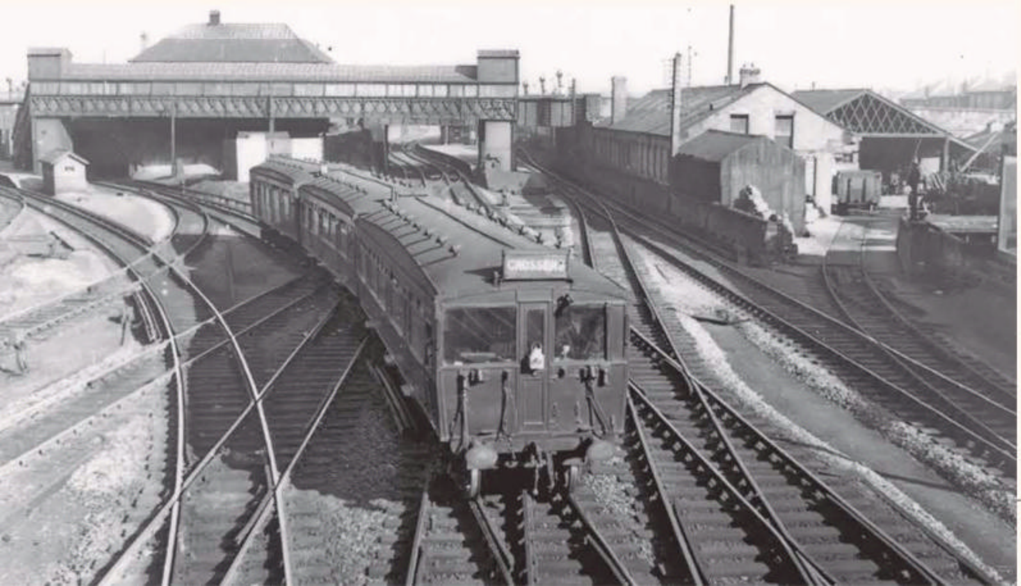
LYR electric train of 1904 for the Liverpool–Southport line. (Pendragon Collection)

trains, then up to Burscough Junction which brought them back to the Preston to Aintree line and thus facing the correct direction to return home when the race was over. These continued to be steam hauled well into the 1960s and when electric trains began to run between Euston and Liverpool Lime Street in the spring of 1966, the refurbished and brand-new stock which would take up work the following Monday was used on the Grand National specials, which involved kitchen cars and plenty of first class seats, all hauled by 'Britannias' or Stanier Class 5 4-6-0s. The following year steam had been banished and the big, impressive-looking English Electric Class 40 diesel-electrics were in the ascendancy.

The Preston to Southport line, to my surprise, didn't, in its later years, generate anything like the business I had imagined, although the arguments for and against its closure, which came at the end of the summer timetable of 1964, still continue. It was always steam operated, by the time I knew it Stanier Class 5 4-6-0s and LMS-design 2-6-4Ts being employed, the carriages non-corridors of LMS design, of which there were still a great many in that part of the world. On my one and only journey, on a spring Saturday, I had the choice of numerous unoccupied compartments and few passengers alighted or joined at any of the seven intermediate stations on the line. One of the line's problems was that these stations were not particularly handy for the communities they served and then again nowhere along the line were there that many people anyway. They were situated on the shores of the Ribble Estuary but were by no stretch of the imagination resorts and thus holiday business passed them by. The replacement was a regular Ribble bus/coach service and when I travelled it one of the beautiful Harrington-bodied 'Tiger Cubs' drew up which was, quite honestly, absolute comfort.

Southport was pure ex-Lancashire & Yorkshire Railway origin. That was exciting for this was the first time I had come to live in the territory of a railway which, although large and important, was not connected with London. Hughes, its last CME, had initially moved on to that post with the LMS and introduced some fine-looking locomotives which, sadly, had flattered to deceive. These were 4-6-0s and their tank engine derivatives, some impressive 4-6-4Ts. The latter especially, like virtually all of that wheel arrangement, proved to be not economical to operate and not even particularly powerful or speedy. They had all gone by nationalisation, whilst one or two 4-6-0s survived just long enough to receive their British Railways numbers. Their predecessors had been some high-stepping inside cylinder 4-4-2s. The only LYR survivors which I ever encountered were some 0-6-0Ts which shunted Liverpool docks and the 'Crab' 5P/5F 2-6-0s. These were *not* of LMS origin, being completed by Fowler after Hughes had retired in 1925, after only two years in post, but there was something essentially Lancashire & Yorkshire-ish about them and they had proved useful enough to survive quite a number of their Fowler and Stanier successors; more than once a 'Crab' turned up on Southport shed during 1964/5.

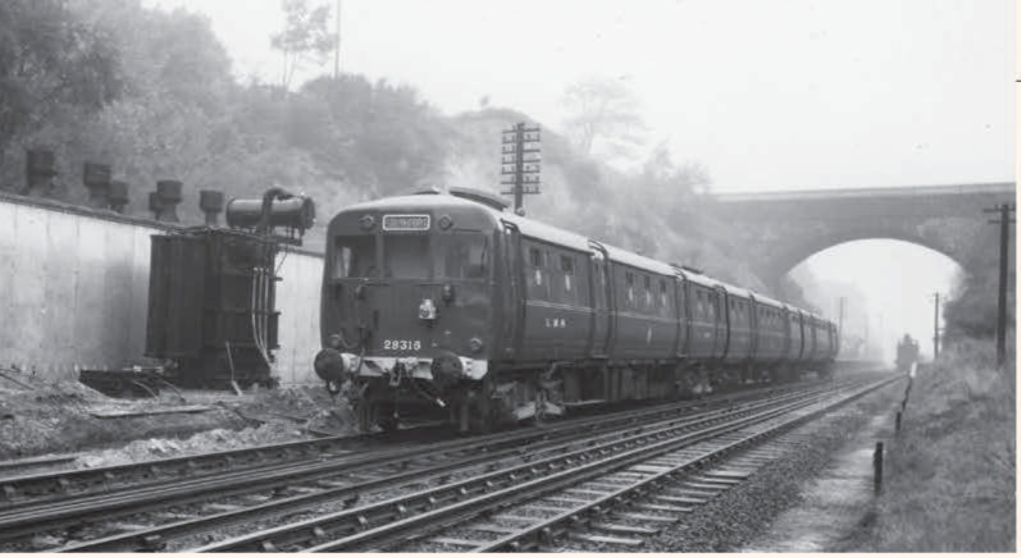
A three-car LYR EMU eaving St. Luke's station, Southport, for Crossens, terminus of electric services on the Preston line, c1935. (Author's Collection)



Perhaps, not surprisingly for a railway which ceased to exist in 1923 and whose express engines were not long lived, few of its locomotives have been preserved, two 0-6-0s, an 0-6-0ST, a couple of 0-4-0ST 'Pugs' and a 2-4-2T, plus, if we may add them to the list, two 'Crabs'. The Keighley & Worth Valley Railway is the best place to find the inevitably tiny number of extant LYR carriages.

The area around Southport is very flat. When practicing to take the driving text, the best my instructor could find in the way of a hill start was a railway bridge. Far away in the distance to the east, but often visible, were the Pennines whilst in the opposite direction, due north, across the Ribble estuary was Blackpool, Southport's great rival, and beyond lay the Lake District's hills and mountains. This meant no great effort was demanded of locomotives with business to and from Southport so that in the days of holiday extras, not quite vanished in the 1960s, 0-6-0s and the like could be trusted to cope.

Mention of 0-6-0s brings up Southport's other main terminus station. This was at the far end of the main and distinctly grand Lord Street and the connection is that 0-6-0s belonging to the Great Central Railway did a fair amount of business there. This was because it was operated by the Cheshire Lines Committee which, as we all know, never owned its own locomotives but relied upon its joint owners for same, hence the Pollitt and Robinson 0-6-0s and other varieties of not very large engines monopolised the Southport traffic. This came from Liverpool and Manchester, mostly, and was thus in direct competition with the Lancashire & Yorkshire Railway. There was even a through service to King's Cross which, when I found



One of the LMS-built Southport electric trains, of all steel construction with sliding doors, motor third No.28315 at the rear. (Pendragon Collection)

that out, really made me sit up and take notice. Through trains between Southport and King's Cross, whatever next? I cannot imagine it could have been a complete train, possibly just a couple of carriages, like those from Euston. I have so far been unable to find anything else about how long it ran for and the exact route it followed. Anyhow, this was long in the past by the time I took up residence in Southport, Lord Street station by then being filled with Ribble buses and coaches. It had closed to trains on 7th January, 1952, giving up the struggle to compete with Chapel Street. It was then bought by the Ribble Bus Company which skilfully adapted it for road use, it becoming a much grander and more comfortable bus station than most others in the land.

Well into the 1930s there had been plenty of summertime holiday traffic at Lord Street and built alongside the penultimate station on the line there had been the truly magnificent Palace Hotel erected in 1866. It was still there in the 1960s and we hired it for the grand art college Christmas Ball of 1966, its interior somewhat faded but still exhibiting some of its not quite gone Victorian magnificence. However, its days were numbered and it was demolished in 1969. The Beatles performed there in 1963 and we hired The Temperance Seven, who had got to the number one spot in 1960. They were the ideal art college band, the members all being originally Royal College of Arts students. They were still popular with the college set but by 1966 the swooning teenage girls were few and far between. I was therefore somewhat surprised and amused to see chalked on a railway bridge in the town on the Wigan line 'I love Brian Innes' which was the name of the band's drummer and most prominent member. Clearly they still had their fans.

Inevitably there were rumours of ghosts haunting the Palace Hotel's 200 bedrooms. Today the only remnants of the CLC's presence in the town is the road built on the track bed and clock tower of its Lord Street terminus, now listed, and I have stayed more than once in the Travelodge which adjoins it. Have I ever encountered on dark, autumn nights, hints of a puff of steam or smelled smoke? Afraid not...

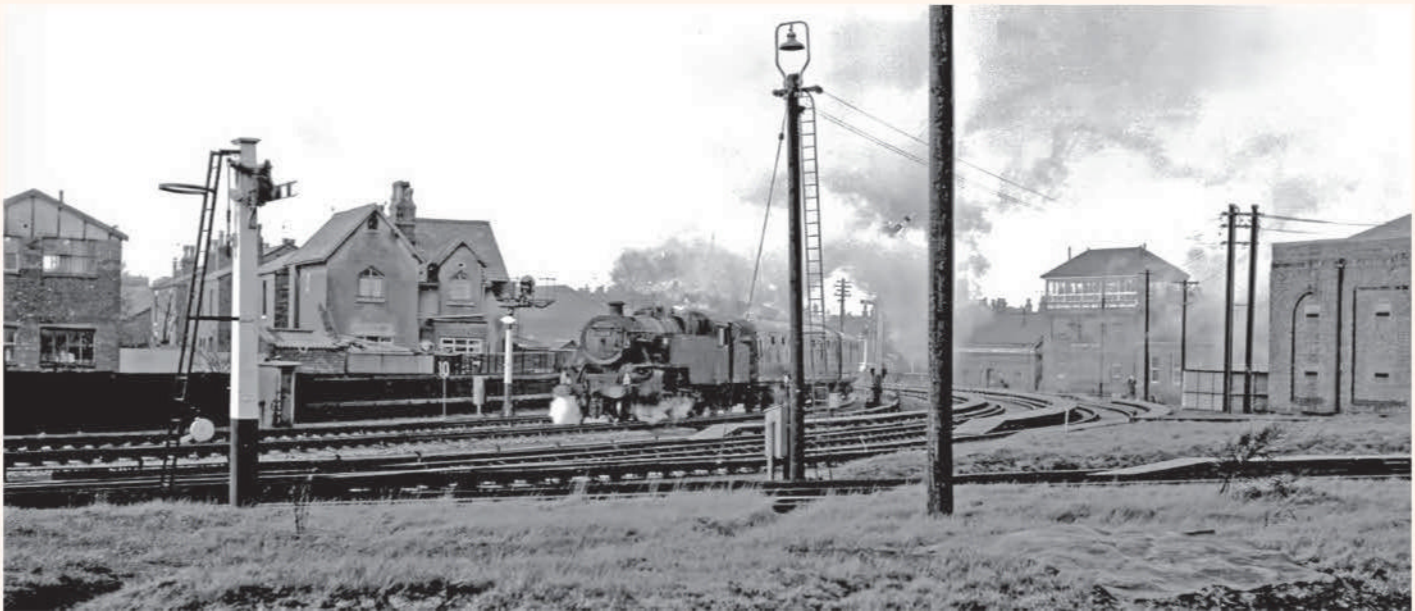
At the height of their rivalry both Southport and Blackpool offered every sort of accommodation from the likes of the Palace Hotel to the humble boarding house. Their populations were roughly equal in 1900 but from then on Blackpool pulled away, going all out for the cheap and cheerful image, along with entertainment, boasting, for example, the most spectacular funfair on the Lancashire coast, a twelve-mile ride in a tramcar along the promenade from Fleetwood and several grand theatres featuring the biggest music hall stars. Meanwhile Southport, which has always been both slightly envious but also slightly superior, set out to attract the more upmarket clientele, golfers – the Open is still regularly held there – businessmen and their families from Manchester and Liverpool to occupy handsome villas, set amongst the well-kept lawns in Ainsdale, Hesketh Park and the like. The story is told that it was brought to the attention of the Lancashire & Yorkshire Railway that one such well-heeled gentleman had just settled in Southport only to be informed by his doctor that he had an incurable illness and so was offered a complimentary first class season ticket between Manchester and Southport for as long as he needed it, yet somehow he recovered well enough to make use of it for the next 40 years.

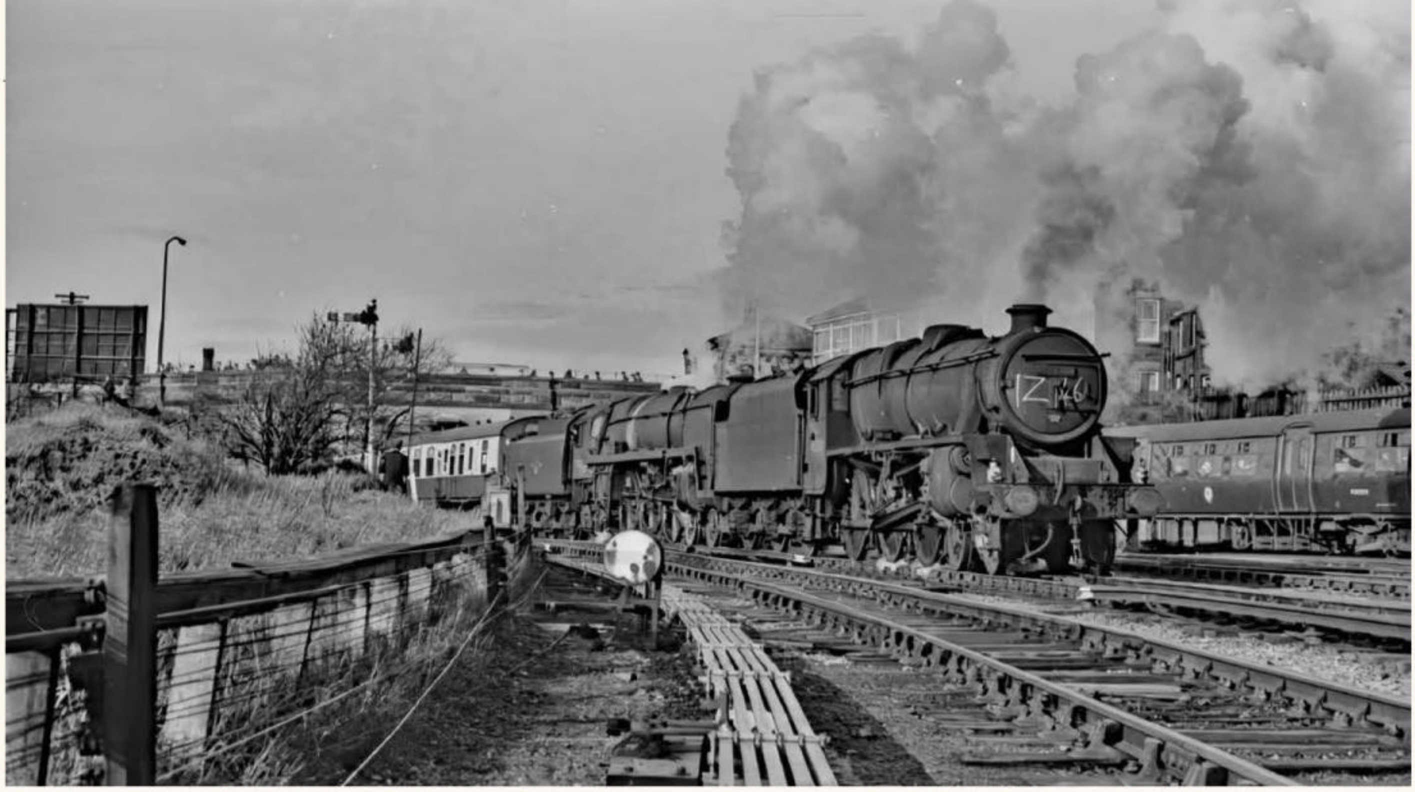
Despite encounters with steam in and around Southport almost until its complete end on the BR network in August, 1968, most of my travels were by electric train. Electrification came very early to that part of the world, Blackpool being the first town in the UK to introduce electric street lighting followed by electric trams in 1885. Southport followed suit with trams on the very first day of 1900. Four years later the Lancashire & Yorkshire Railway electrified the line between Liverpool Exchange and Southport Chapel Street. Further routes out of Exchange as far as Aintree were electrified in 1906 and then, in 1913, on to Ormskirk on the line to Preston. A year later a short stretch from Aintree to Gladstone Dock, for dock workers, had the third rail added, although this lasted only until 1924. Transatlantic influences, already strong on account of immigration, were strengthened when the world's first electrically-operated elevated railway opened in 1893, worked by American-style trains running above the length of the Liverpool dock system, and by 1905 was connected to the LYR Liverpool–Southport line at Seaforth and Litherland, enabling trains on special occasions to run between Southport and the southern extremity of the Liverpool Overhead Railway at Dingle.

Of huge importance was the electrification of the Mersey Railway from Green Lane, Birkenhead, under the River Mersey to Liverpool James Street in 1903. It was the first UK railway to convert entirely from steam to electricity. Once again, the trains looked as if they would have been totally at home in New York or Chicago. It would eventually form part of the Merseyside electrified network and connect with Southport, but not until 1977.

It may well be that this influence extended to the electric trains serving Southport for, unlike their contemporaries in the South London suburbs, they were of open design with doors at the end of each carriage. It could be argued that separate doors to each

An LMS Fairburn 2-6-4T departs from Southport with the through coaches to join a Euston express in 1965. (Author)





Class 5 4-6-0 No.45330 and an unidentified 'Britannia' Pacific leave Aintree with the stock of a Grand National special on 8th April 1967, working round via the Southport Chapel Street avoiding line to be facing the right way for the return journey. (Author)

compartment enabled passengers to get in and out quicker but that an open layout enabled passengers to move about more freely within the carriage. The LMS added eleven electric multiple units in 1927, which were compartment stock, just like those the company built for the London area, but when the time came at the end of the 1930s to replace the original Southport line EMUs, the LMS came up with something pretty revolutionary. Built at the company's Derby Work, between 1939 and 1941, they were capable of reaching 70mph, were of open layout, all welded, integral construction and had electro-pneumatic sliding doors. I travelled on them every day, Monday to Friday, in 1967/8 and although it has to be admitted that, like practically all EMUs of that era, their riding left something to be desired, they were still totally modern.

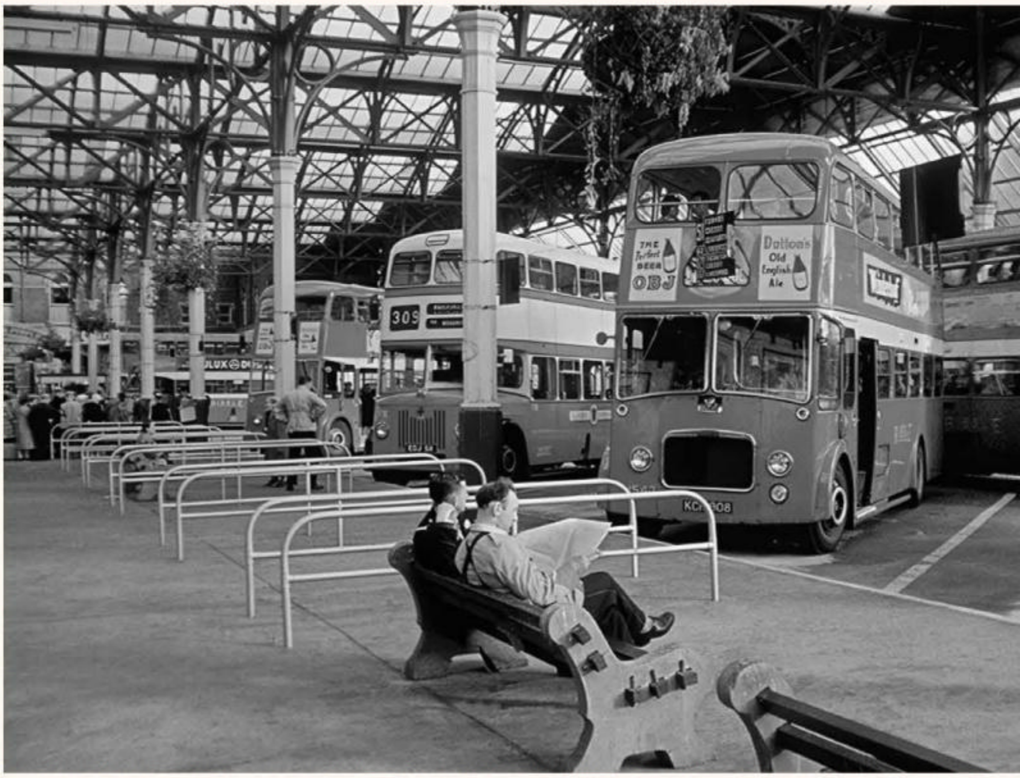
The success of the Southport electrification system encouraged the Lancashire & Yorkshire Railway to turn its attention to Manchester and in 1916 the already experimentally electrified route from Holcombe Brook to Bury was extended on the third rail system through the heavily populated area to the south, terminating at Manchester Victoria. The trains, like those serving Southport, were of saloon layout with end doors but an advance on them in that each carriage was constructed entirely of steel and aluminium, wood being totally eliminated.

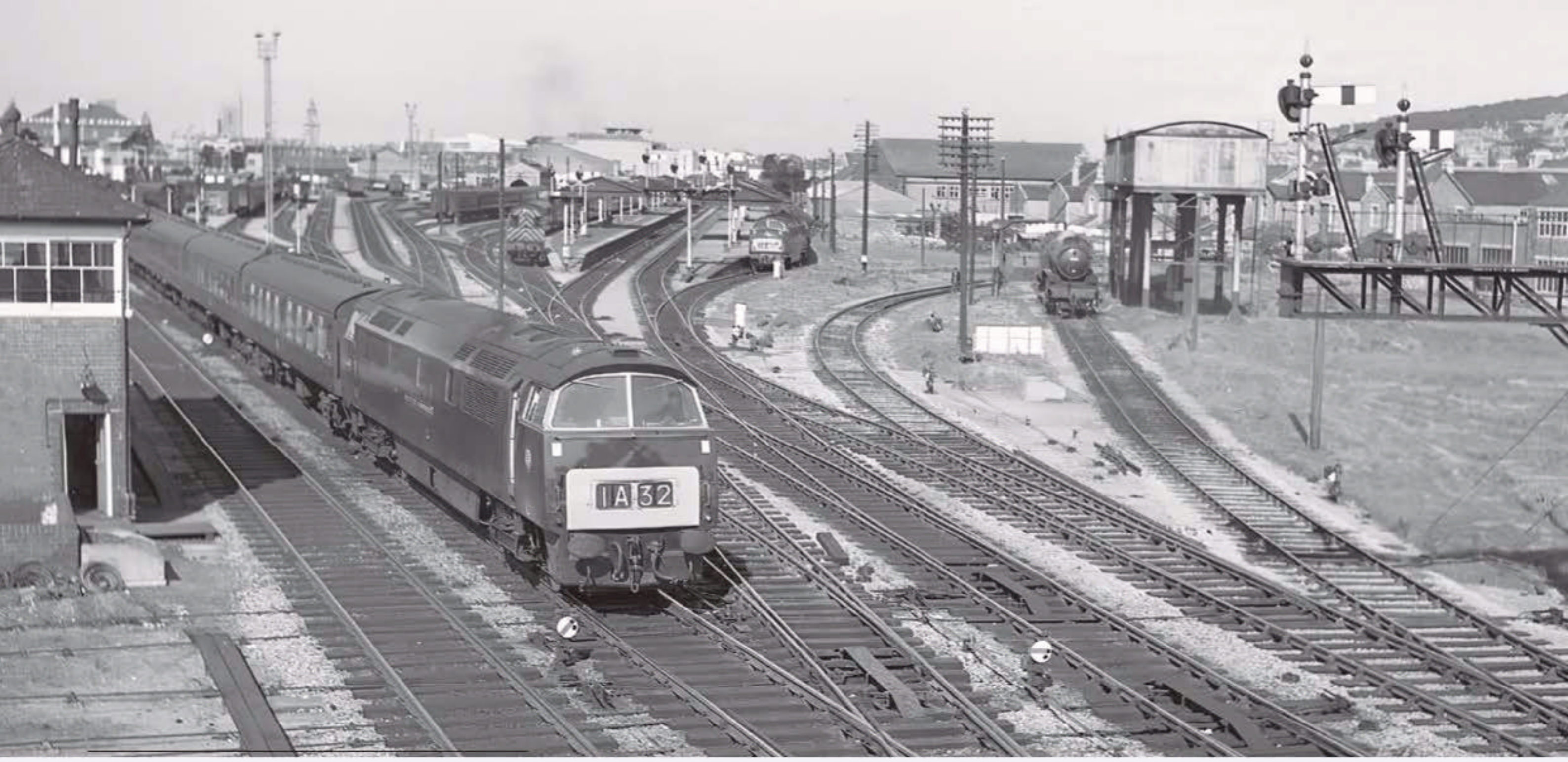
The closure of the Southport to Preston line in September 1964 was not total for the electrification of the Liverpool to Southport line incorporated the laying of the third rail out as far as Crossens on the northern edge of the town. Three and half miles distant from Chapel Street, the electric trains performed a frequent service to St. Lukes, Meols Cop (by reversing), Hesketh Park and Churchtown stations. In addition a large, impressive brick built depot was built within the triangle formed by St Lukes, Meols Cop and Hesketh Park stations. This suburban electric service was deemed redundant at the same time as the steam trains between Southport and Preston were withdrawn, not without some opposition, although the depot remained open until 1970. It dealt with mechanical and electrical repairs, bodywork being the responsibility of Horwich Works. Some repair work took place in Birkenhead from 1970. Today Meols Cop, served by diesel trains on the Wigan and Manchester line, is the only one of those four stations to survive.

Most extraordinary was the proposal to close the Liverpool to Southport line. The logic behind removing this much used commuter service left all and sundry utterly astonished. It was enough to make the Liver Birds flap their wings in disbelief. Fortunately it was quickly rescinded and the birds could resume their normal unflappable posture.

Preserving EMUs is a thankless enterprise. Valiant souls have rescued examples of both the LMS Wirral and Southport varieties. But what do you do with them? A preserved railway offering third rail opportunities is unthinkable; health and safety forbids. Running a preserved EMU on Network Rail presents mind-boggling difficulties. You can, perhaps, push just one coach of a unit up and down behind a diesel on a preserved railway but it is hardly a re-creation of its original reality. Compared with that, restoring to working order a pannier tank or a Stanier Class 5 must seem like child's play.

The former Cheshire Lines Committee's Southport Lord Street station in use as a bus station in 1965. (Author)





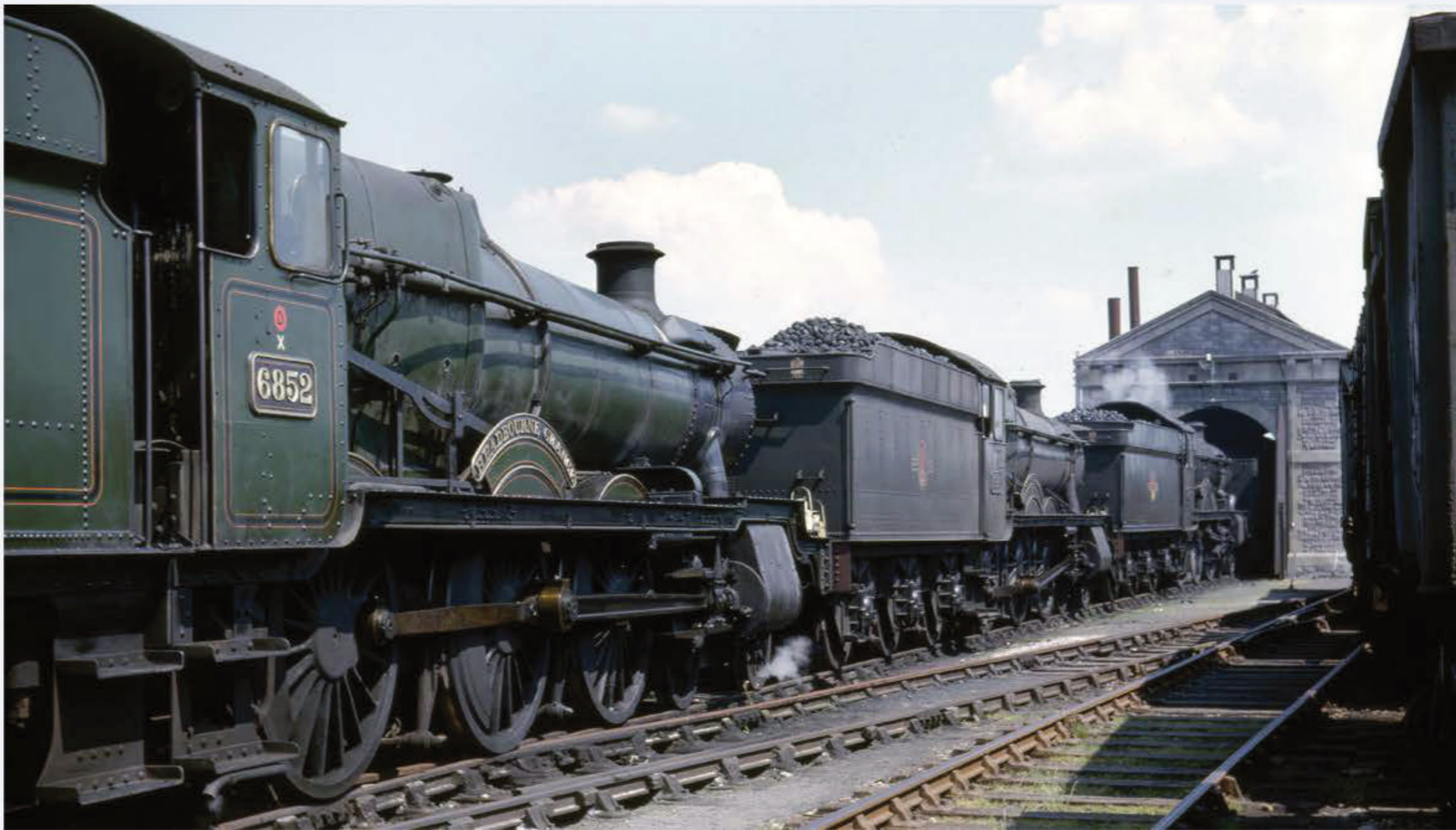
Despite the presence of a road bridge just to the east of Weston station few pictures such as this panorama seem to have been taken, which shows Weston General station curving away to the left with the platforms of the dead-end Locking Road to the right. In the platform there on empty stock is 'Warship' No.D867 *Zenith* whilst having been turned we have B1 4-6-0 No.61094 which awaits its return working to Sheffield as 'Western' No.D1029 *Western Legionnaire* heads for Paddington. (Colour-Rail.com.31323)

THREE HOURS ON A SATU

How would you like to spend your Saturday morning? As a railway enthusiast you might opt for some lineside observations although services on a winter Saturday might not match those provided from Monday to Friday, or in the summer peak in some instances. On today's railway what works a particular service is usually highly predictable by class although the time the train passes may be less so. The chances are that the number of passenger trains you might see would exceed those experienced 60 years ago whilst freight provision could have seriously deteriorated, although even 60 years ago freight trains on Saturdays were usually less frequent that seen on weekdays.

Let me take you to Summer Lane. Perhaps not a destination you would be familiar with, suffice to say that it lies between Worle Junction and Worle station on the Bristol to Taunton main line. The Junction at Worle will route trains into, and through, Weston-super-Mare, rejoining the line at Uphill but allowing cross-country services to ignore the 80,000 or so residents of Weston and bypass the town via the 'main line'. The latter would be used by most freight services when such things existed in this part of the West of England. Back in the 1960s the use of the main line by expresses in the winter months was far less than today but on summer Saturdays it was a different matter with most trains to and from the south west not calling at Weston. There were also summer services that ran to Weston Locking Road but that had

Weston had a one-engine shed which was a sub-shed of Bristol Bath Road and at one time had a nominated locomotive allocated, but by the 1960s this had ceased and indeed the resident yard shunting duty was taken over by a 350hp diesel. The visible presence of three main line engines indicates strongly that this picture was taken on a bank holiday when up to a dozen engines were stabled there. Closest to the camera is 'Grange' No.6852 *Headbourne Grange*. (Colour-Rail.com 322900)



The Plymouth–Liverpool working using Shrewsbury and Newton Abbot engines was a long-standing fixture in the timetable calling at Weston-super-Mare as seen here in 1958 with Newton Abbot-allocated 'Castle' No.4098 *Kidwelly Castle*. The return train ran in the afternoon and did not call at Weston.
(Colour-Rail.com BRW1246)

RDAY

BY J. CROSSE

little bearing on sightings at Summer Lane.

Sixty years ago this was a peaceful place where a strangely wide bridge took a quiet country lane over the line. It was wide in both directions as it was designed to allow for quadrupling of the line it would seem, whilst its construction had led to a doubling of the road width at this point. The flat land of the Somerset levels spread out in three directions whilst the town of Weston was visible three miles distant on the fourth. Today it lies in the midst of numerous houses and the traffic is constant. Gone are those familiar railway wire fences which allowed access to vast bushes of blackberries in the autumn, replaced by that delightful paling fencing. Should you venture there today to view the passing trains you would have plenty to keep you busy as interrogation of Realtime Trains reveals that from 09.30 to 12.30 you should record 26 passenger services plus, in season, the railhead treatment train. There are four basic traffic flows: Paddington to Weston-super-Mare (with some trains going through to Taunton and beyond) – six, cross-country trains with destinations from Edinburgh in the north to Penzance in the south – nine, long-distance 'slow' trains from Cardiff to Plymouth and beyond – six, with finally local stoppers from Severn Beach to Weston – five.

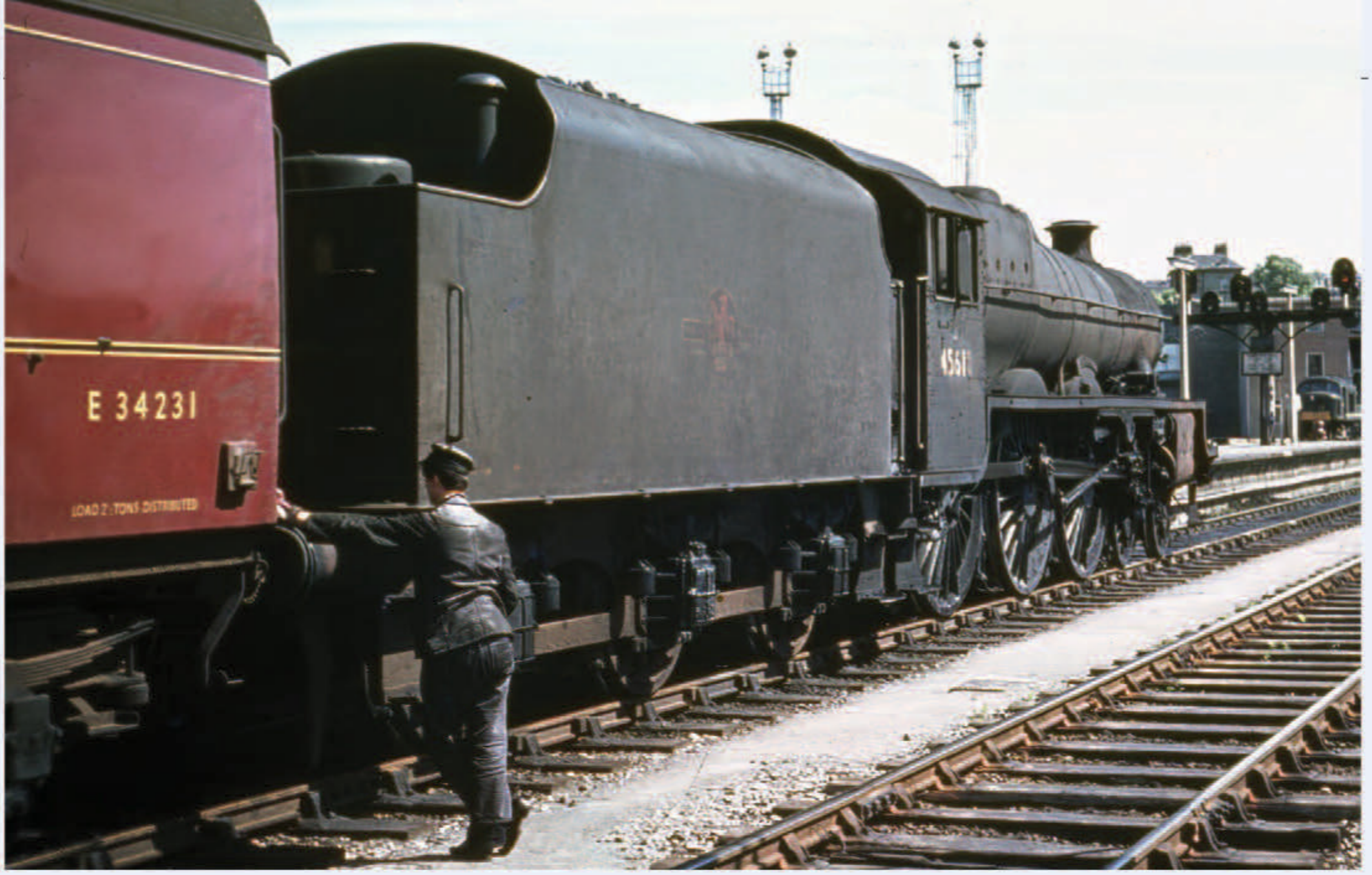
But enough of today; let us go back to the 1960s. As a schoolboy, unless you were fortunate enough to go to a school that backed on to a railway line, Saturdays were the prime time to go spotting, a hobby that still had to be fitted in around being at home for lunch, at least in our house, and so spotting time was from around 9.30 until 12.30. Returning for an afternoon session in the winter was more than many could endure; the one thing Summer Lane bridge was not was windproof and coupled with that, the Saturday afternoon service outside of the summer timetable could best be described as pathetic. Diesel multiple units had come on the scene at Weston around 1958 and the 'Warship' hydraulics began to make their presence felt in 1960 but not in vast numbers, with all freight activity being firmly in the hands of steam power.

The 'Kings' were not common in Weston, especially after their removal from Laira shed, until the final few weeks of their lives when some of those allocated to Old Oak Common were allocated to Paddington–Weston duties on summer Saturdays in 1962, with on one occasion three arriving. No.6021 *King Richard II* had fewer than eight weeks of active service left when seen in Weston. For three years it had been allocated to Laira and is seen in that time at Newton Abbot on 29th May 1958.
(K. Fairey/Colour-Rail.com 11378)

THE ROYAL DUCHY
150

We start our story in the summer of 1961, if only to illustrate that on Saturdays steam was very much in the ascendency. A typical day was 29th July when in just two hours 33 movements were recorded, these being in the hands of five 'Castles', two 'Counties', eleven 'Halls', six 'Granges' and one each of '47XX' 2-8-0, '43XX' 2-6-0 and 'Britannia' No.70019 along with 'Patriot' No.45532 on the Weston Locking Road service to Sheffield, this arriving very late on this occasion as a light engine from Barrow Road, getting into Weston just twenty minutes ahead of its departure time. Also seen was 'Black 5' No.44853 of Leeds Holbeck on an unidentified 1X45 to Weston whilst diesel power comprised just No.D819 on the up 'Devonian' and two DMUs, one on a local and the other on a Swansea to Weston service. Nineteen trains avoided Weston running via the main line.

In those days the summer timetable finished on the first Saturday of September. For a couple of weeks a few extras were provided before 'normality' returned and our Saturday spotting became mundane, but not all the time. So what did our regular diet of trains comprise? First off we should see the

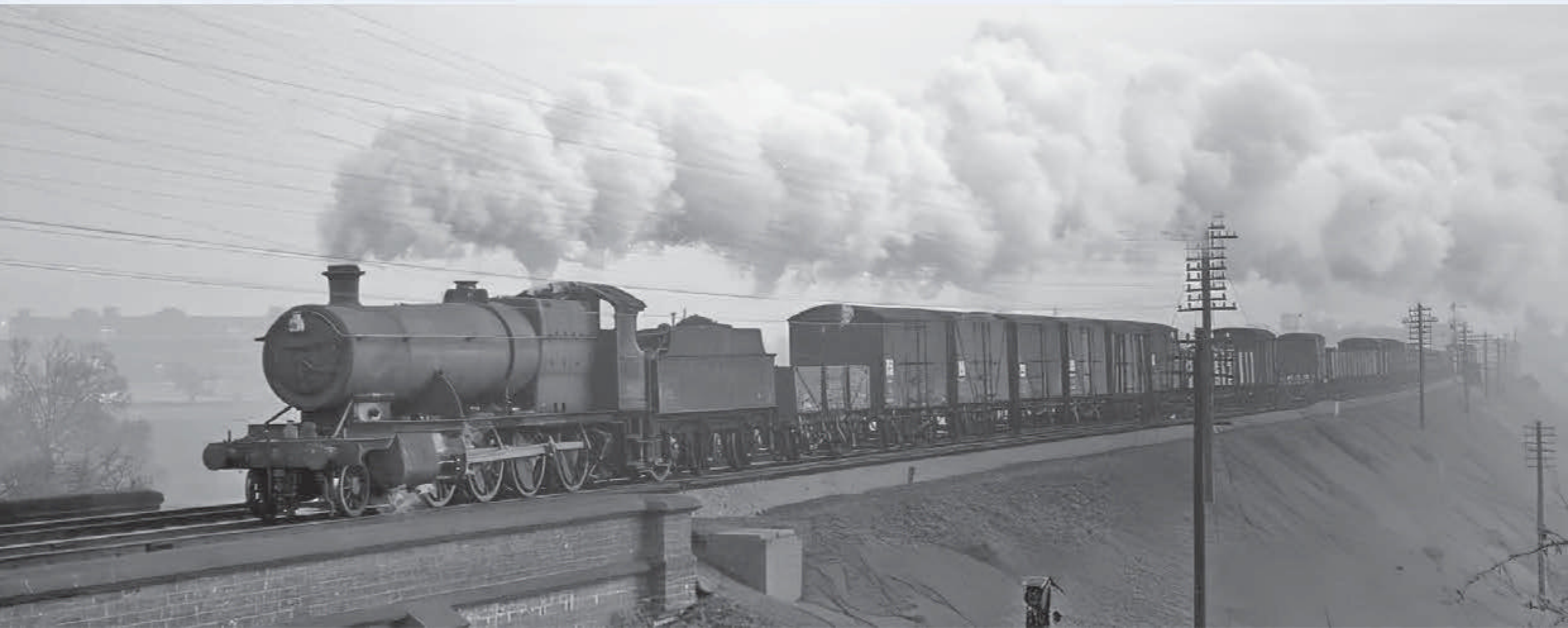


LMS-designed passenger motive power only reached Weston on excursions and to work summer Saturday through trains to the Birmingham and Sheffield areas, hence this scene at Bristol Temple Meads where 'Jubilee' No.45610 *Ghana* is being detached from its cross-country service and would be replaced by Western Region motive power to complete the trip to Devon or Cornwall.
(Colour-Rail.com 302182)

only Taunton–Paddington train, due away from Weston at 9.40am along with further Weston–Paddington trains at 10.40 and 11.40. We were treated to one service from the capital but that was what formed the 11.40 return, the 10.40 locomotive coming from a Bristol–Weston stopper which came down just after 10.00. The sum total of our other passenger delights were a Cardiff–Plymouth train that avoided Weston and a Paddington–Taunton, whilst northbound we had the 'Devonian' (Paignton–Bradford) and the highlight of the day, the Plymouth–Liverpool, this being a lodging turn worked on alternate days by Newton Abbot and Shrewsbury sheds which were very competitive on the turn-out of the rostered 'Castle', and the Saturday saw the Shrewsbury engine working home. Just one 'local' ran in either direction with a DMU in charge.

All the turns except the aforementioned lodging duty were usually covered by a 'Warship', leaving freight activity to spread a little steam happiness. The first regular working was the local pick-up which arrived from Bristol around 10.00am and returned as a light engine after the 'Devonian' around 12.15. At the start of the '60s this was predictably in the hands of a St. Philips Marsh pannier tank. The other freight services were less reliable but for instance on 16th October a 50-wagon train behind No.3852 of Severn Tunnel Junction went down at 10.23 whilst Worcester-allocated No.5994 headed north with 38 on at 10.32 soon followed by No.6386 at 10.47 with just 27 in tow. That locomotive was allocated to Machynlleth, a location rarely featured at Weston but the down side was that its previous shed was St. Philips Marsh so it was almost a local engine. This was winter spotting at Weston at its best!

Moving into 1962 and we had lost that really special steam service as 'Warships' now worked through from Paignton to Crewe via the North and West Route – regular long-distance steam was already a thing of the past. The school holidays at Easter provided an opportunity to sample weekday trains but suffice to say, generally the only cheer for a steam enthusiast was provided by the freight trains. On 9th April Ivatt 2MT



The ranks of the early '28XX' 2-8-0s thinned out rapidly in the early 1960s and after the demise of No.2807 in March 1963. No.2822, allocated to Taunton, was by far the oldest survivor and appeared regularly on a northbound freight on Saturdays at Weston. It even survived being ousted from Taunton ending its days at Barrow Road in November 1964. Unfortunately this atmospheric shot of it in action caries no details with regard to the date or location.
(Colour-Rail.com 4857)

2-6-2T No.41203 from Barrow Road provided some shunting activity at the junction with a weedkilling train whilst 'Hall' No.7901 and '28XX' No.3845 were on freight duty.No.3845 returned south the next day when Nos.5067 and 5941/54 also appeared with goods services. A very small stud of 'Castles' remained in the west as emergency cover for a diesel failure and the delight of the day was to find No.5098 of Newton Abbot turned out for the 'Devonian'. This was what spotting was all about – the unexpected.

18th April was an exceptional day for freight with Nos.2822/58, 4077, 5024, 5940/76 all in action plus a light engine move by No.4904. Once upon a time Bank Holiday Mondays were a real event but firstly the arrival of the DMUs and then in 1962 the use of the new 'Hymeks' changed things completely as the latter worked thirteen trains. Traffic was still brisk with 35 trains recorded in those usual three hours but steam, what steam? We were treated to a rarity, it has to be said, when 'Manor' No.7805 of Cardiff Canton was turned out for a Taunton–Bristol stopper, the class always being a rarity in the area, whilst two excursions enlivened proceedings with Tyseley sending No.7918 and Old Oak providing No.7017 to spend a day at the seaside.

The summer timetable of 1962 was truly the final fling for long-distance steam on the Western ahead of the slaughter of vast numbers of named engines in the September. On 7th July traffic was still brisk with no fewer than 38 trains recorded in our three-hour window. Unlike 1961 when just two trains were diesel-powered, steam power was very much in the minority. The day started brightly with No.5003 on a special to Bolton followed by Sheffield-based 'Jubilee' No.45576 working down on a local ahead of its duty going back home at lunch time. It was soon followed by 'Black 5' No.45263 of Saltley. One service that was still mainly steam on Saturdays was that from Weston to Paddington and vice versa with Nos.5008/94 and 6959 being employed northbound whilst the first arrival brought 'King' No.6021. This was the only summer that 'Kings' abounded with sometimes two making it to Weston. The other steam appearances brought six 'Halls' and a 'Grange' past the observers. Whilst 'Warship' numbers were up it was the use of nine 'Hymeks' which made the major dent in steam numbers.

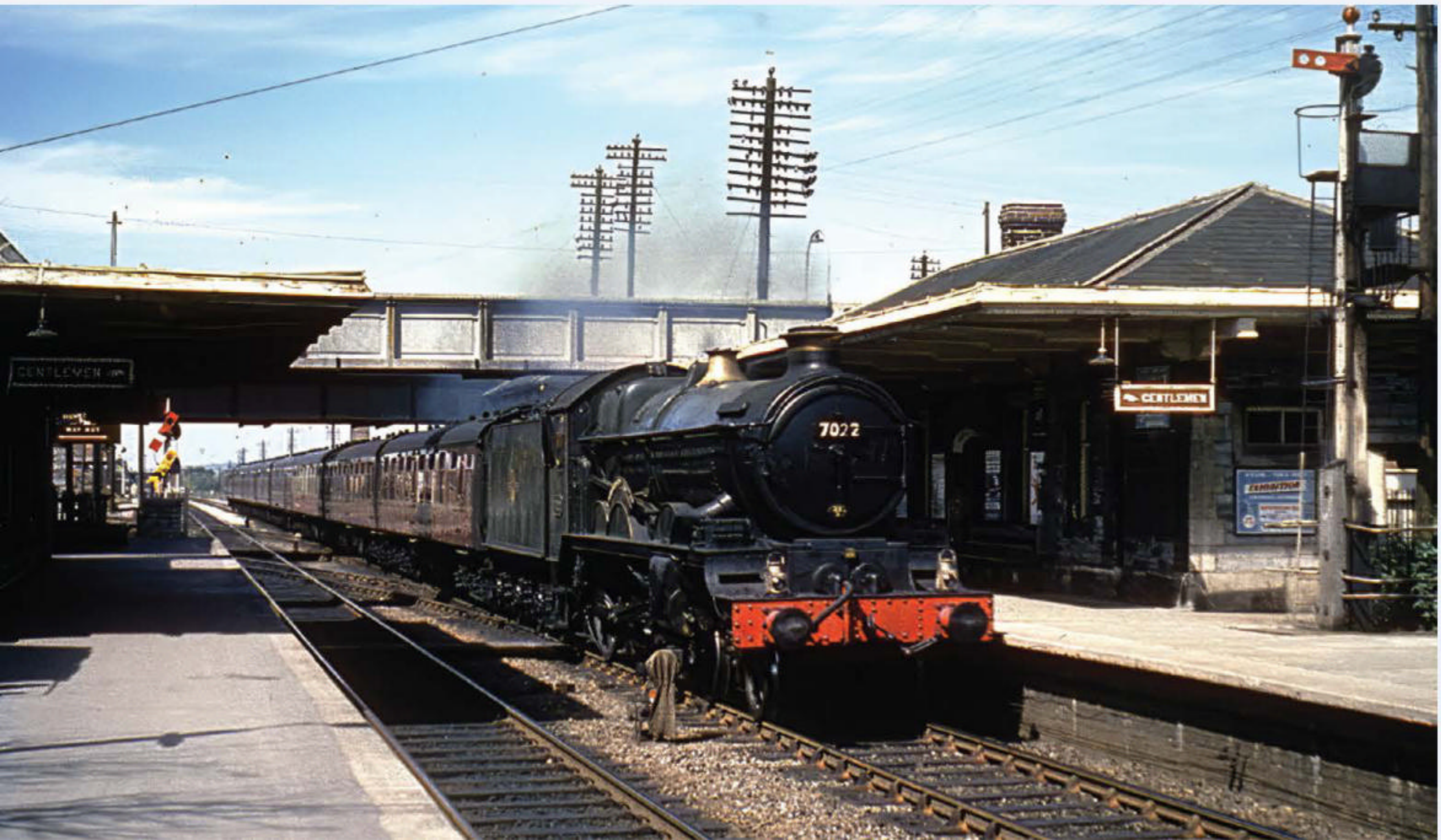
As summer receded visits to Summer Lane were determined by the ambience of the weather. 29th September was typical with just two steam appearances, 0-6-0 No.3218 had just one brake van to play with on the pick-up goods whilst No.2871 of Taunton had the regular northbound freight. A week later and a 'Hall' and 'Grange' provided the entertainment. Quite why I wandered to Summer Lane on the afternoon of 6th October is a mystery but it was worthwhile despite the paucity of traffic – just nine trains in two hours but the regular 3C04 parcels was headed by 'County' No.1000 whilst freight was handled by Nos.2822, 6959 and the amazing sight of 9F No.92153 from Toton. The last visit of the year on 2nd December produced not a single steam working. Hibernation was on the cards and as a portent of things to come were the days of relentless winds from the East.

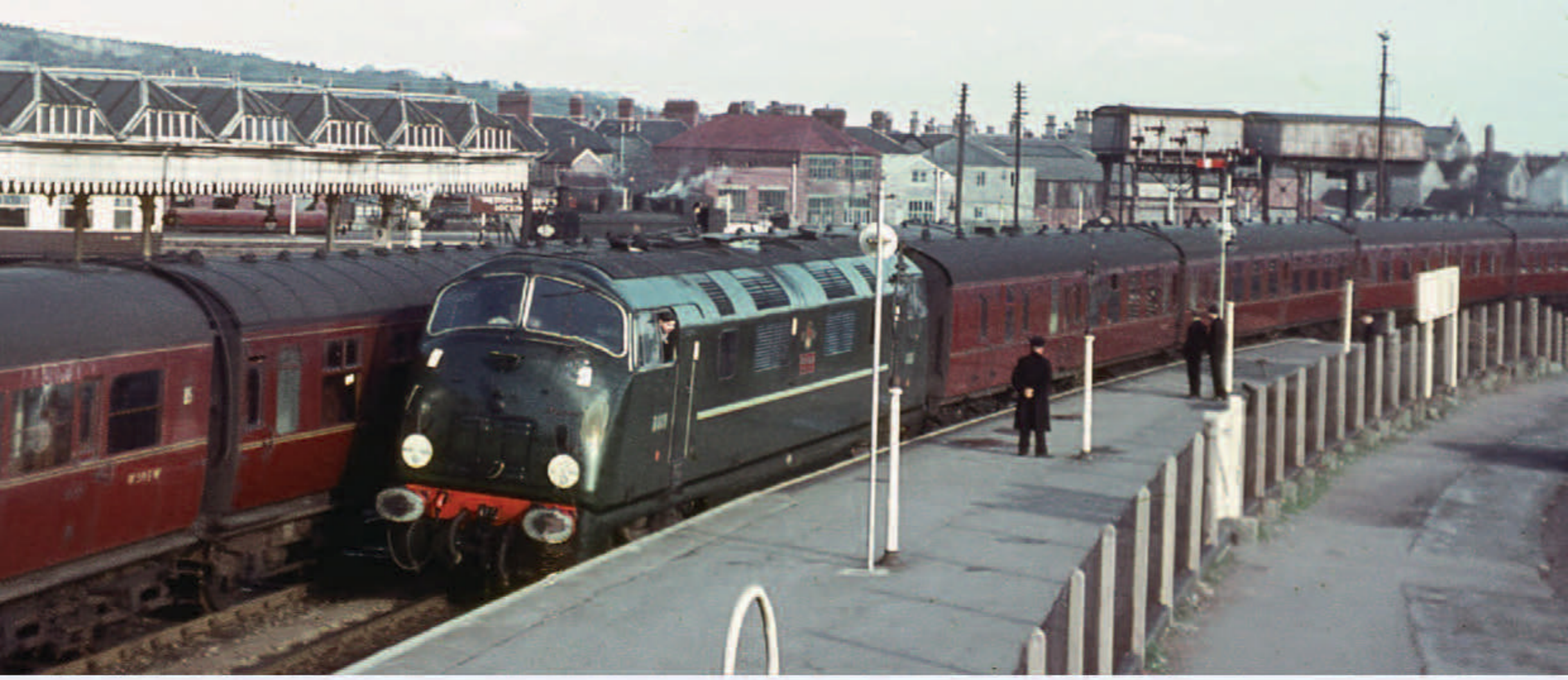
It is now with some regret that I did not venture out to the line in January 1963 at the depths of the big freeze as when I did brave the still sub zero temperatures on 16th February it was to a world transformed. The diesels seemed to have little liking for such temperatures and the first train of the day, the Taunton–Paddington, was headed by 'Hall' No.6936 of Cardiff East Dock followed by No.6913 (Reading) on a freight. 'Grange' No.6833 (Oxley) and 'Hall' No.6954 (St. Philips) also worked freights whilst the star turn was allocated to 'Grange' No.6863 (Reading) at the head of the Plymouth–Manchester service whilst No.6981 (St. Philips) worked the Cardiff–Plymouth train. Pannier tank No.3677 brough up the rear on the pick-up goods. Just four 'Warships', two 'Hymeks' and a DMU saw service with both 'Hymeks' on freight turns, suggesting inoperable train heat boilers. The following two Saturdays provided more steamfests and it was not until 2nd April that some normality appeared to have returned. That said we were treated to a visit by 2-8-2T No.7249 of Severn Tunnel Junction standing in for the more normal '28XX' – another rarity. However, it seemed that the Taunton–Paddington service was a regular steam turn throughout the spring although the engine would be replaced by diesel traction at Bristol Temple Meads.

The summer of '63 saw a further squeeze on the use of steam power although not in the total number of trains provided at no fewer than 39, of which twenty had a 'Hymek' in charge on 13th July. The first steam to be seen was Saltley's No.44812 working down for the return to Sheffield. No.6915 (Shrewsbury) was allocated to a Weston–Swansea at 10.05. Nearly two hours then passed before 'Jubilee' No.45564 of Holbeck appeared on a Derby–Weston train but then was rapidly followed by 'Grange'No. 6842 (Stourbridge Junction) with the late 11.40 to Paddington whilst a return to 1961 was seen with No.7022 of Laira heading the Penzance–Liverpool service. Finally Tyseley's No.6926 took the Minehead and Ilfracombe to Wolverhampton service north – total just five. Strangely the winter timetable saw little change in steam activity to that witnessed a year earlier. One interloper was *Flying Scotsman* which headed south on 19th October.

Change was afoot as we entered 1964 with the running of driver training turns on Brush Type 4s, the first of which had just

'Castle' No. 7022 *Hereford Castle* was the final member of the class to leave the books of Laira shed, clinging on to cover for diesel failures, and it had been called into action on 13th July 1963 on the prestige working from Plymouth to the North West. Some twelve months earlier in June 1962 it is seen heading south at Bridgwater.
(A. Wild/Colour-Rail.com BRW1024)





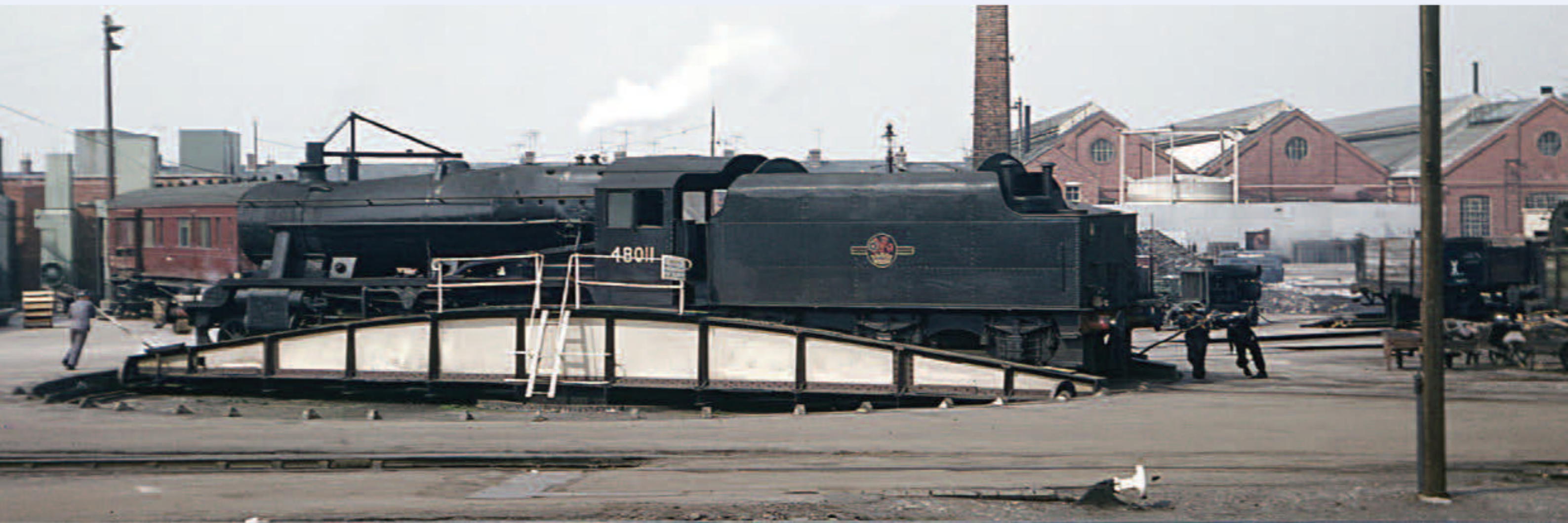
been allocated to Bristol Bath Road with No.D1689 out on 2nd January. With the closure of St. Philips Marsh shed imminent, Barrow Road would soon become responsible for any southbound steam workings and the local pick-up freight saw engines such as Nos.5206, 4978 and 7916 provided. A rare beast indeed was Watford's 8F No.48011, turned out for a southbound freight on 8th February. It was also the first Saturday on which the use of a 'Western' on the 11.40 to Paddington was recorded, this recently having been in the hands of the rare Cardiff Canton based-'Hymeks' and it appeared on the same train the following week. Star on the 21st was a light engine move by EE Type 3 No.D6824. That made three new classes in just over six weeks. Another 8F appeared a week later, this time No.48633 from Crewe South. On 29th we were treated to two 'Westerns' Nos.D1041/53 and yet another 8F in the shape of No.48684 from Birkenhead. By the end of March the 11.40 to Paddington was firmly established as a 'Western' duty with several different class members having been seen and on 6th April another first was recorded when Nos.D1009/71 were both seen on freight duties within 30 minutes of each other.

With the summer approaching Whit Sunday saw another first for this spotter when No.D1715 was used on an excursion from Wolverhampton to Weston, whilst the summer timetable saw one final twist in the tale of steam with the semi-regular appearance of an LNER B1 4-6-0 which was supplied for the down local and return Weston–Sheffield; on 15th August this was No.61093. Of note was that this was the only steam engine seen in our three-hour slot. The use of 'Westerns' declined from its pre-summer peak. Outside our time span it was noted that two services from Paddington arrived behind Brush Type 4s. Into the winter months once more and it was noticeable that the number of 'Warship' turns hade decreased with 'Westerns' and 'Hymeks' being the staple power. Just the pick-up goods remained steam powered, still anything from a pannier tank to a 'Hall' was provided. It must have been a particularly pleasant day on 19th December as an extra half an hour was invested in my stay at Summer Lane with a near record turn-out of twenty movements with four by a DMU, six with 'Westerns', four each by 'Warships' and 'Hymeks', whilst pannier tank No.8795 came down and back with the goods turn.

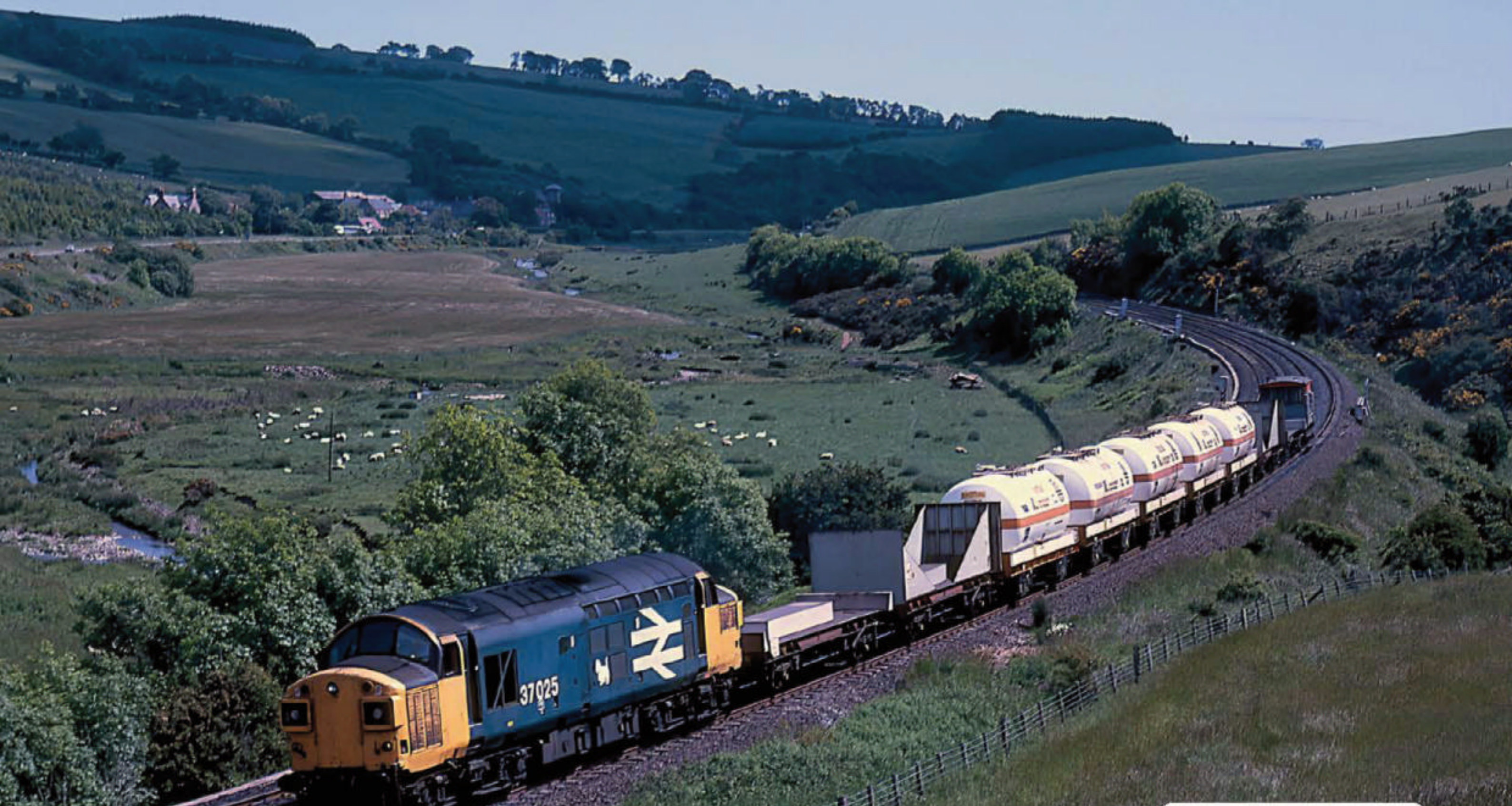
The start of 1965 saw the status quo retained and on 6th March the pick-up duty turned in 8F No.48000 of Derby, proving that a 'cop' was still on the cards but steam days were numbered. A month later Standard 3MT No.82038 was turned out for the goods but a total surprise perhaps to anyone north of Taunton was the breakdown train heading north behind a class rarely seen at Weston in later years, being Standard Class 4 No.75025 complete with Exmouth Junction shed plate. With the arrival of the summer timetable I at last had some money in my pocket and transferred my allegiances to Bristol Temple Meads. Steam there hung on by a thread with the few passenger workings having engines supplied by Oxley or Saltley. Brush Type 4s abounded and the next big change was on the way. Tradition had dictated that engines were always changed at Bristol on cross-country services but 1966 was to see regular through workings of both 'Peaks' and Brush Type 4s to the West Country, making 'Warships' something of a rare breed. In six years they had come and nearly gone between Bristol and Taunton. In due course the 'Westerns' followed in their footsteps. Few would have predicted that in 1976 that process of change would come again as gradually High Speed Trains swept almost everything aside.

Quiet moments at Summer Lane are almost a thing of the past on a winter Saturday now as Class 800s rule with frequent trains and cars roll incessantly through that once idyllic little spot in the country.

The arrival of the 'Warships' signalled the end of the use of steam through Weston on weekdays and winter weekends for almost all long-distance services. No.D808 *Centaur* rolls into the down platform, which was much shorter than the up, on 25th January 1962. A set of stock blocks the centre run round line and the resident pannier tank can be seen in the background.
(Colour-Rail.com 64752)



There was a time when LMS 8Fs were common around Weston as St. Philips Marsh had its own allocation but by the mid-sixties their appearances were noteworthy as none was allocated anywhere nearer than Birmingham. No.48011, however, seemed to have an affinity for the Western Region as here it is seen being turned at Swindon on the works turntable on 3rd April 1965.
(R. Kingshott/Colour-Rail.com 317442)



On Friday 26th June 1987 Class 37 No.37 025 is seen on the East Coast Main Line at Houndwood, Berwickshire, with 8X98, the 08.00 Haverton Hill to Grangemouth HCN empties, which is loaded to its permitted maximum of five discharged tanker wagons (plus barriers and a brake van). Note the two variants of barrier wagon, both types being specially weighted. (Douglas Johnson)

DEADLY CARGO

DAVID J. HAYES looks back at what was once regarded as the deadliest substance ever moved by rail in the UK

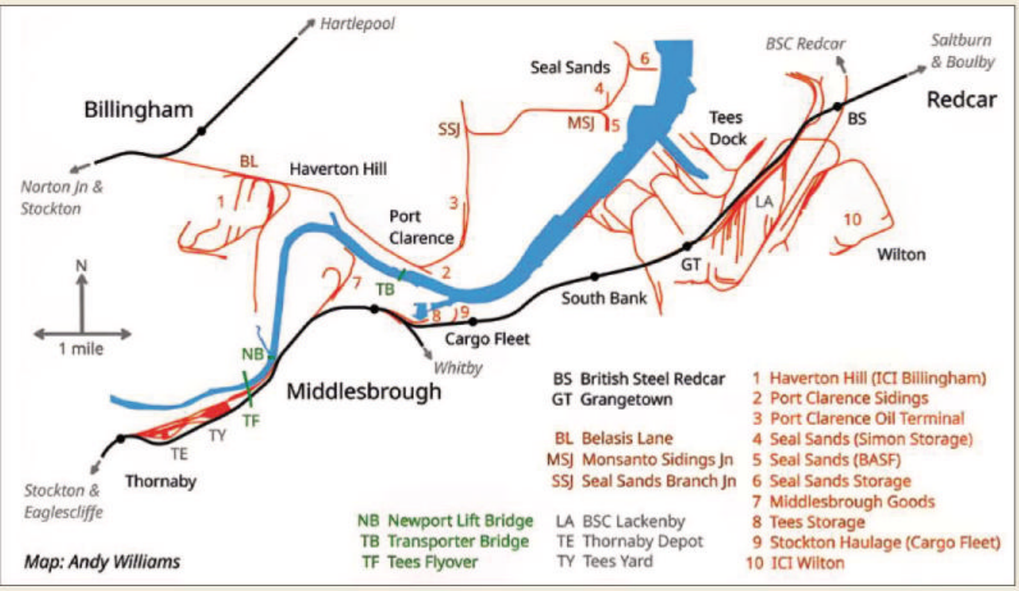
The fact that British Rail (BR), and rail transport in general, has been trusted to move significant tonnages of hazardous chemicals and flammable liquids for considerable distances across the country, including to and from mainland Europe via the Dover and Harwich train ferry operations, and through major conurbations, is a testament of the railway's excellent safety case record.

Yes, accidents do occasionally happen, but rail was always the preferred transport mode, where possible, when it came to such movements and especially so when consignments were significant enough in volume to be handled by means of running block train services direct between manufacturer and customer.

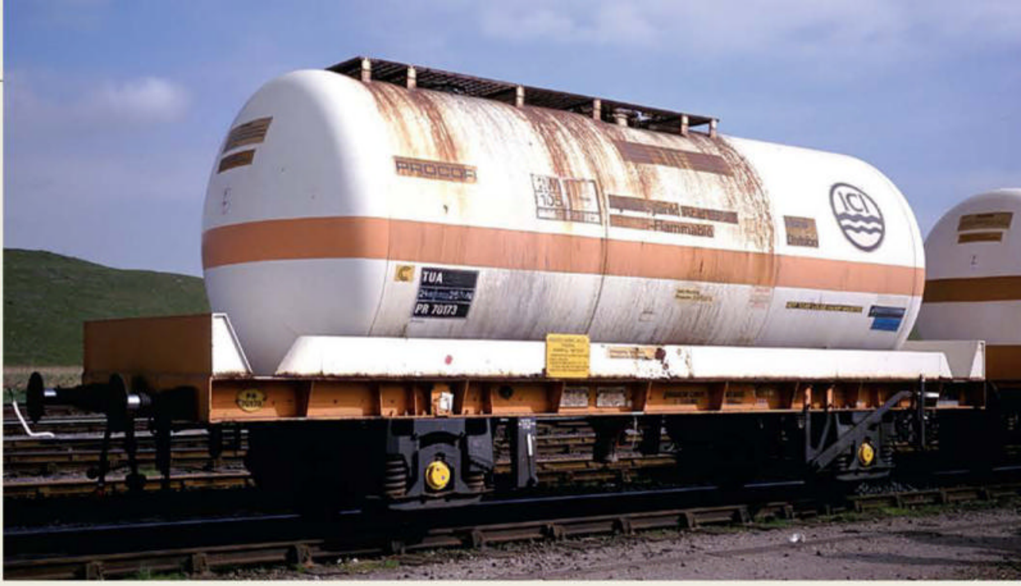
Although not exactly measuring up to the bulk trainload model visually, as such, because of their comparatively short train length (see below), the deadliest traffic entrusted to rail movement here in the UK in years past was that of Hydrocyanic Acid – cyanide! Used in a variety of manufacturing processes – eg acrylicic fibres, dyeing, engraving, explosives, tempering steel – Hydrocyanic Acid is a solution of hydrogen cyanide in water (aka prussic acid) and has the chemical abbreviation HCN.

In addition to the production uses mentioned above, HCN was also to be found in the trade-named substance known as Zyklon-B (translated Cyclone-B). This was a hydrogen cyanide-based pesticide invented in Germany in the early 1920s which was notoriously used in the Nazi concentration camp gas chamber atrocities of World War II.

With regards rail movements of HCN in the UK, such trains were short vacuum-braked formations (later converted to air brake operation in the late 1970s), often consisting of just a handful of wagons plus barrier wagons. New-build two-axle air-braked TUA type tanker wagons were later introduced in 1980 for transporting this lethal product. These were flanked fore and aft by substantial-looking, purpose-built PXA barrier wagons (specially weighted to give a tare of 14-tonnes) with a guard's van positioned on the rear when running on the main line, thus enabling the train guard to lay down detonators in rear of the train in an emergency situation to both protect it and to warn approaching trains of the hazard ahead. The locomotive crew would handle similar train protection protocols for


Hartlepool
Billingham
Norton Jn & Stockton
BL
Haverton Hill
SSJ
Seal Sands
4
6
MSJ
5
Tees Dock
BSC Redcar
Saltburn & Boulby
Redcar
BS
1
3
Port Clarence
2
LA
10
Wilton
N
1 mile
7
TB
8
9
GT
South Bank
Cargo Fleet
Whitby
NB
Middlesbrough
TF
TY
TE
Thornaby
Stockton & Eaglescliffe
BS British Steel Redcar
GT Grangetown
BL Belasis Lane
MSJ Monsanto Sidings Jn
SSJ Seal Sands Branch Jn
NB Newport Lift Bridge
TB Transporter Bridge
TF Tees Flyover
LA BSC Lackenby
TE Thornaby Depot
TY Tees Yard
1 Haverton Hill (ICI Billingham)
2 Port Clarence Sidings
3 Port Clarence Oil Terminal
4 Seal Sands (Simon Storage)
5 Seal Sands (BASF)
6 Seal Sands Storage
7 Middlesbrough Goods
8 Tees Storage
9 Stockton Haulage (Cargo Fleet)
10 ICI Wilton

Map: Andy Williams



TUA Hydrocyanic Acid tanker PR 70173, as seen at Tees Yard in May 1994. Of note is the buffer over-ride protection, as seen at each end of PR 70173, to prevent such an occurrence from happening and potentially rupturing the tank barrel. (David Ratcliffe)

trains approaching from the opposite direction.

Movements of HCN by rail in the UK date back to the mid-1960s (circa July 1966) and were focussed on the North East where several major chemical companies, including giants BASF (Badische Anilin-und Sodafabrik, which is German for Baden Aniline and Soda Factory) and ICI (Imperial Chemical Industries), had established plants and storage tank farms on the north and south banks of the River Tees (see accompanying map).

A regular main line movement of HCN ran from the outset from British Petroleum's Grangemouth refinery to the Cassel plant situated within the huge Haverton Hill complex (aka ICI Billingham). By the early 1970s this inter-Regional trunk haul had been joined by a short-haul indigenous HCN movement on north Teesside operating between the BASF works at Seal Sands and Haverton Hill, which covered a distance of about five miles. The introduction of the BASF service meant that the frequency of the Grangemouth train could then be subsequently reduced to twice weekly.

The Grangemouth and BASF workings were initially given Class 7 (45mph maximum) status, but were later demoted to Class 8 (35mph) operation. They also ran with the letter 'X' in the headcode, thus indicating, as per Working Time Table regulations, that an 'Exceptional Load' was being transported. A further operating restriction was imposed on the indigenous movement on Teesside, requiring that it only ran during daylight hours and at a maximum speed of 15mph throughout.

Both flows of HCN to Haverton Hill were equally restricted to a maximum of five-loaded tankers plus barrier wagons per journey (as were the empty workings), that from Grangemouth also requiring a brake van to be marshalled on the rear for the reasons explained earlier. Rather surprisingly, this wasn't a mandatory requirement for the localised movements on Teesside, presumably because there would be no other trains following-in-rear during the short-haul BASF runs to and from Haverton Hill.

For a time, the service from Grangemouth required that brake vans be positioned fore and aft of the formation due to making a booked call at Millerhill Yard where a run-round manoeuvre was required. This was during a period when other traffic was allowed to be conveyed as well, if need be.

By January 2000 the loaded working from BASF, which by that time was now the only HCN movement operating on the network, had been permitted to load to a maximum of eight loaded TUA tankers (plus PXA barriers), as were the return empties.

An exceedingly worrying experience

The movement of HCN trains was issued with a satchel containing an emergency medical kit just in case of the unlikely event of them being exposed to the lethal cargo. The said 'survival kit' apparently contained hypodermics to self-administer a life-saving antidote if such an occurrence were to happen. However, it is debateable as to whether or not the train crew would have been able to react quickly enough to administer the said antidote in such a time-critical situation. In addition, a small red-coloured box mounted on the tanker wagons themselves contained an emergency medical kit.

As I'm sure many reading this will probably know, cyanide, apparently, has a faint almond-like odour. Although confirmation would be welcomed, legend has it that the driver of an HCN train caught a whiff of this nutty aroma wafting around the cab of his locomotive. With an absolute look of dread on his face he turned to his crew mate, only to see him sitting there with a big grin on his face as he devoured a Mr. Kipling almond slice; I think we can well imagine the exceedingly colourful language that ensued!

HCN: BR to EWS

The movement of HCN by rail survived the transition from BR operation into the privatised EWS (English, Welsh & Scottish Railways) era when the three pre-privatisation shadow freight organizations Transrail, LoadHaul and Mainline Freight (collectively formed by BR in April 1994) were acquired by American railroader Wisconsin Central in February 1996, although such traffic by that time on Teesside was already beginning to wane. The twice-weekly working from Grangemouth to Haverton Hill had finished in the early 1990s and was followed a decade or so later by the demise of the localised HCN movements from BASF to Haverton Hill, which itself by the early 2000s had become less frequent and/or was running with fewer wagons.

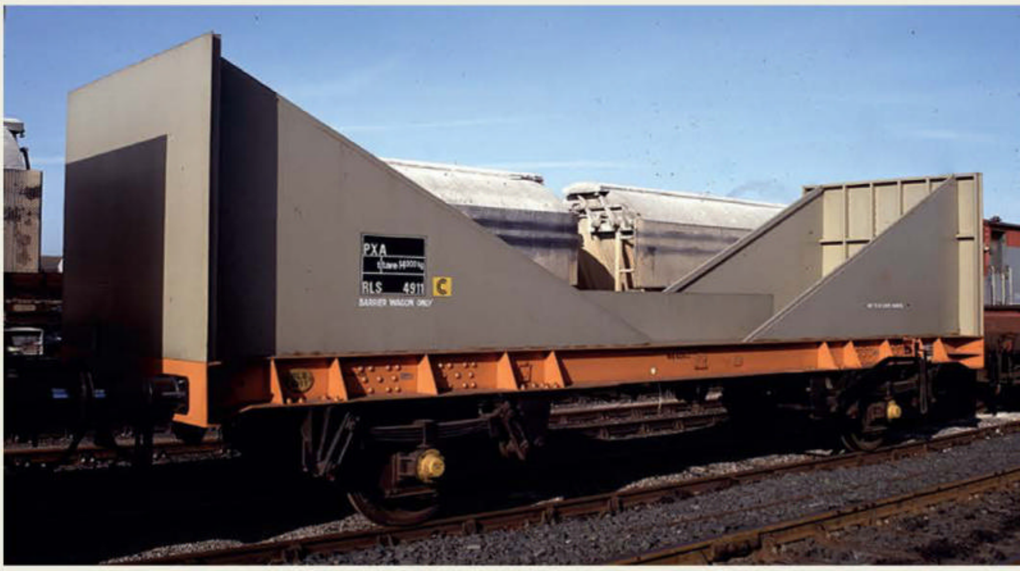
New plant installed at BASF Seal Sands would allow the HCN produced on site there to be used 'in house' for the manufacture of acetone cyanohydrin, an organic compound used in the production of methyl methacrylate (the monomer of the transparent plastic polymethyl methacrylate – aka acrylic), which could then be delivered by pipeline to Haverton Hill, thus obviating the need to move the HCN by rail to Haverton Hill for this production process to take place.

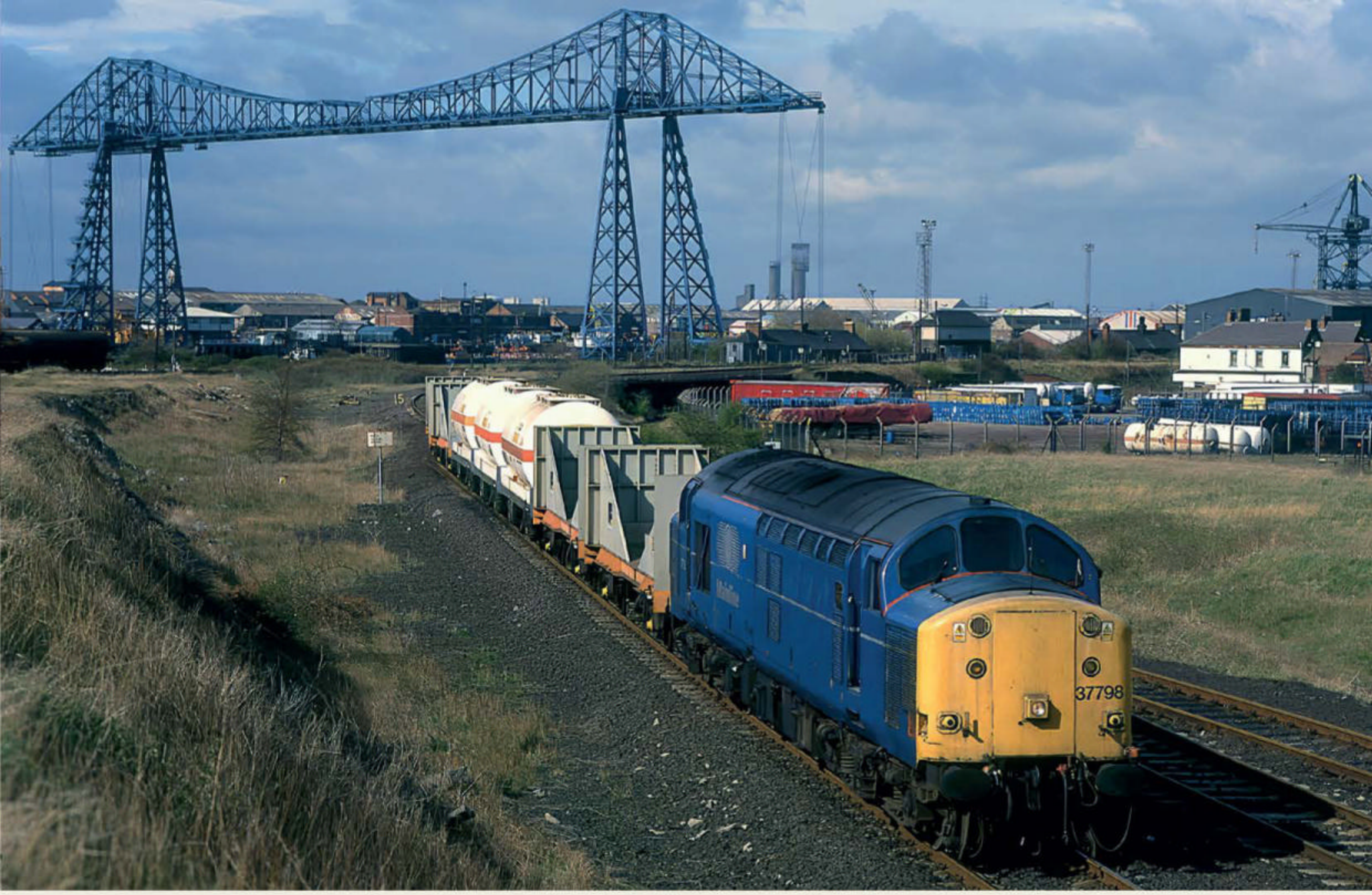
After almost 26 years of operation, the last loaded HCN train ran to Haverton Hill on Thursday 25th April 2002. It was hauled by Class 56 No.56 046 and was formed of seven TUA tanks with a pair of PXA barriers positioned fore and aft of the formation. Its five-mile 15mph trundle from BASF Seal Sands marked the end of not only this deadly cargo on Teesside and the railway in general, but also that of all rail activity at the Haverton Hill chemical complex.

Haverton Hill In retrospect

To conclude, it is perhaps worth giving

One of the substantial PXA barrier vehicles (RLS 4911), as seen at Tees Yard in March 1992. These were usually to be seen marshalled in pairs at either end of a HCN formation. (David Ratcliffe)





Friday 21st April 2000: the indigenous movement on Teesside is depicted here at Port Clarence with EWS Class 37 No.37 798 (still in former Mainline Freight livery) heading 8X03, the 10.40 Friday morning departure from Haverton Hill, conveying just three discharged TUA tanks (plus barriers) to the BASF plant at Seal Sands for reloading. The Grade II-listed Tees Transporter Bridge (opened in October 1911, but currently not in use), measuring 850ft long and standing 225ft high, makes for an impressive backdrop to this rather splendid industrial scene. (Douglas Johnson)

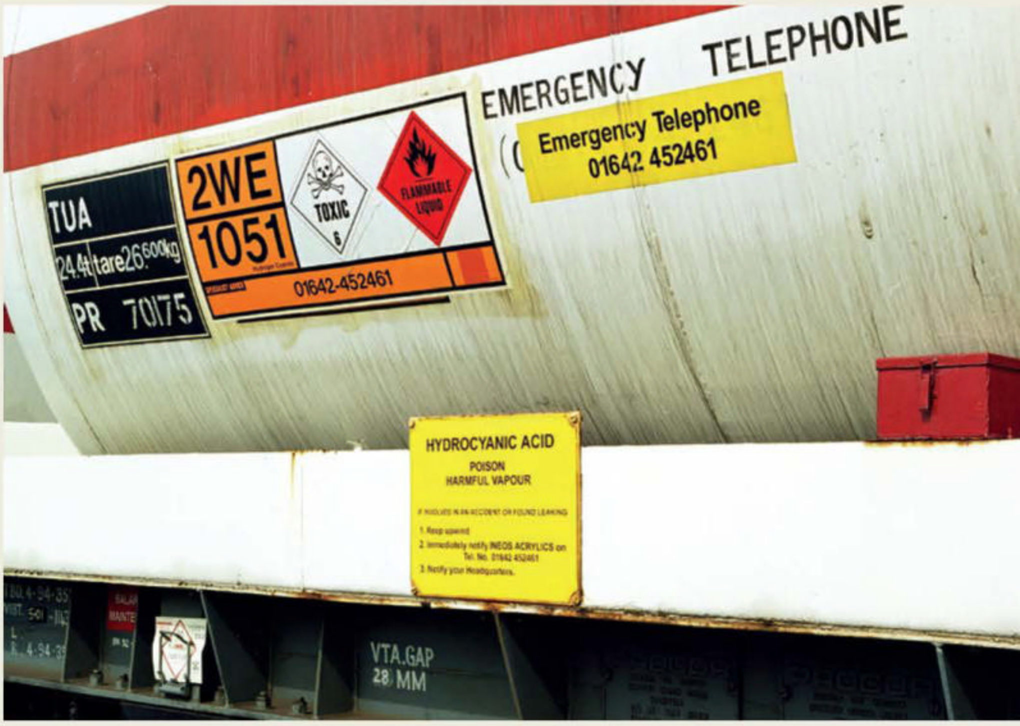
Haverton Hill some further recognition, as its importance as a major rail freight customer in the North East cannot be overstated. In addition to the HCN traffic described, the ICI plant had once generated a variety of other rail-borne business, its rail freight portfolio over the years consisting of block trains of anhydrous ammonia to Avonmouth (Severn Beach, aka ICI Severnside), Barton-on-Humber, Grangemouth, Heysham and Leith plus a combination of trainload and/or wagonload movements of carbon dioxide (CO_2) to Ardwick, Bow, Coleshill and possibly, as well, to Newton-le-Willows and Willesden (both replacement CO_2 destinations for Ardwick and Bow respectively), methanol to Barry, Duxford, Eastleigh, Ellesmere Port, Immingham and Langley Green, and urea to Duxford.

There were also European wagonload exports of amines, anhydrous dimethylamine and molten phenol to the likes of France, Germany and Switzerland. However, any European chemical business generated by Haverton Hill still remaining on rail by the mid-1990s would have soon been lost when the Dover to Dunkerque train ferry operation finished in December 1995 (sailings of the Harwich to Zeebrugge train ferry had ceased in January 1987), as hazardous chemical commodities are not permitted to pass through the Channel Tunnel.

Acknowledgements

I would like to acknowledge the accomplished published works of David Ratcliffe and Paul D. Shannon, the collaborative work of Trevor Mann and Mark Saunders, Wikipedia, and to thank Andy Williams (for the map), David Ratcliffe, Douglas Johnson and Paul D. Shannon for their valuable contributions to this feature. As author of this body of work, I take full responsibility for any errors and thus welcome any corrections or other related comments via the Readers' Forum section.

The warning data panels affixed to the tank barrel of PR 70175, as seen at Seal Sands; note the wagon-mounted small red box containing an emergency medical kit. (David Ratcliffe)



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***BACKTRACK* is always keen to encourage the submission of suitable material by prospective authors and photographers but, to avoid possible disappointment, the following general notes might be helpful to indicate the preferred form which submissions should take.**

POTENTIAL AUTHORS

EDITORIAL POINTERS

As hinted by its name, the magazine is exclusively historical in content, but the definition of 'historical' will be loosely interpreted and potential contributors should not feel inhibited should they wish to relate historical practices to the current situation if relevant in the context of an article; there is a degree of flexibility. As a general guideline, we take the view that at least ten years should have passed before a subject is appropriate to BACKTRACK.

BACKTRACK aims to provide something for everyone within its pages. Balance and objectivity will be the over-riding philosophy and, overall, we try to provide material which does not favour any one specific system whether it be defined by pre-group company, post-grouping allegiance or BR Region. Most importantly, we seek accuracy, scholarship and readability with an emphasis on encouraging new and different ways of looking at things.

Rail transport was and is as much about people as machines and we shall always try to inject a human element into the journal and encourage writers to take a broader view than mere counting of class totals, enumeration of fleet lists and many other familiar themes known to us all. There will always be some space for such matters but the magazine's founders set out to create something of a 'thinking person's journal' within its pages. Railways had a profound influence in setting the style and pattern of much that we take for granted in the modern era, over and above the mere technology of the vehicles, and it is hoped that potential contributors may find extra inspiration in this approach.

BACKTRACK rarely ventures into the well-ploughed field of current railway preservation save where relevant in the historic context. This apart, however, we shall neither encourage nor discourage particular subjects and potential writers should concentrate on whichever topic they prefer — locomotives, rolling stock, stations, particular companies etc. Contributors may also feel free to let their ideas run pretty well unfettered if they so choose! We shall always pay close attention to anything which is offered.

In general, articles will be more likely to be selected for publication if they address areas not so far publicised in other journals. They should be well-researched, authoritative and preferably accompanied by high-quality illustrations.

PREFERRED STYLE AND FORMAT

Main feature articles should be of some 3-5,000 words, submitted electronically or in typescript, single-sided and double-spaced on A4 size paper. Shorter articles (500-3,000 words) are also welcome to help balance the content. Illustrations should be provided on a basis of about one per 500 words of text (preferably more to allow flexibility of choice). Maps, drawings, etc. should also be submitted if relevant, ideally of reproduction quality.

If an article is only rendered unusable by virtue of excessive length and/or sub-standard pictures or drawings, we may elect to shorten the text, substitute different pictures or have artwork redrawn. We can also accept articles without supporting pictures provided it is understood that if **we** cannot locate illustrations, the article will not be published. In all such cases authors will be advised in advance.

We can supply a copy of our preferred forms of abbreviation and other relevant style points on request.

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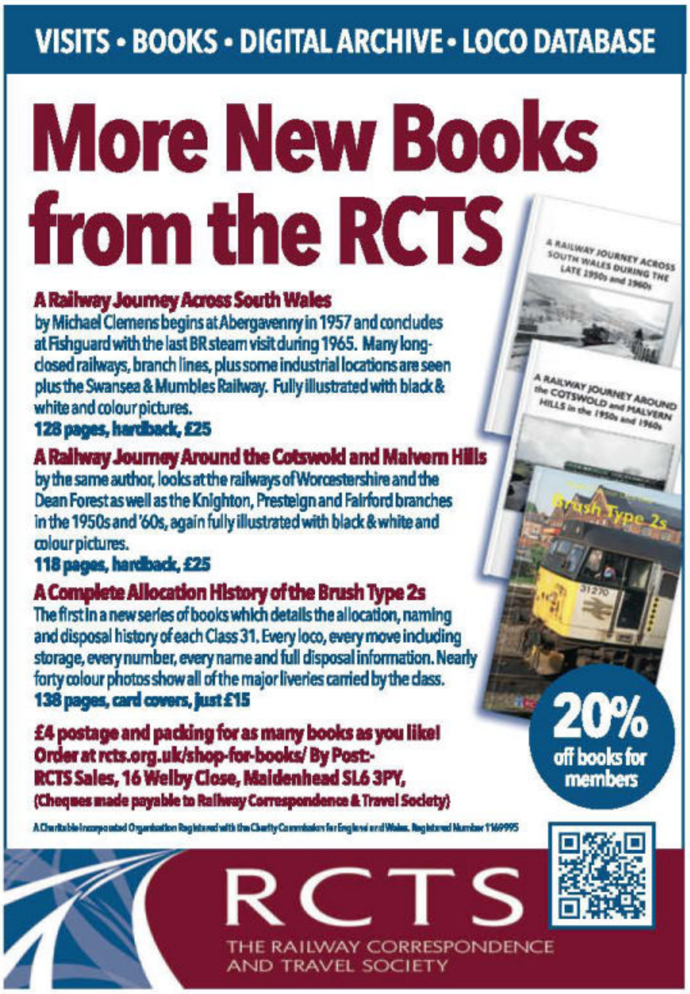

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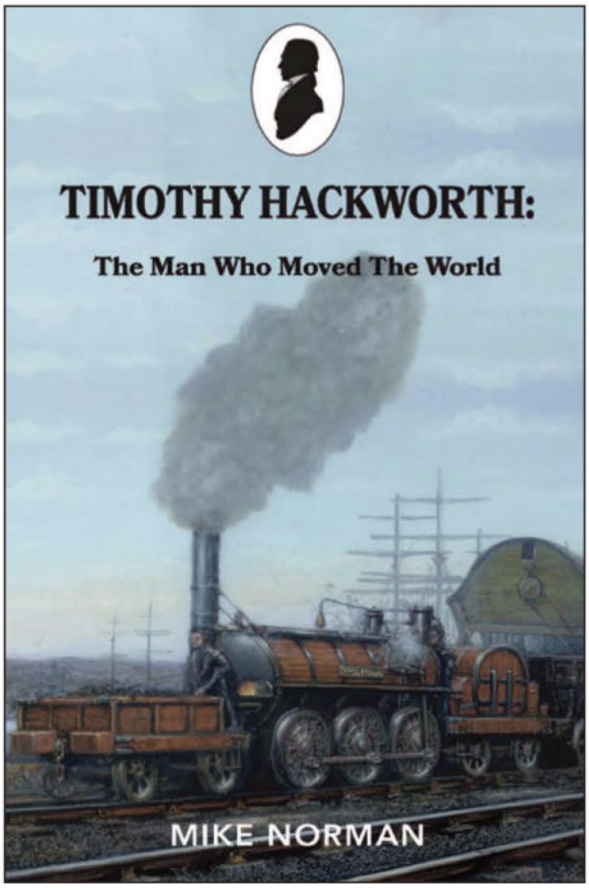

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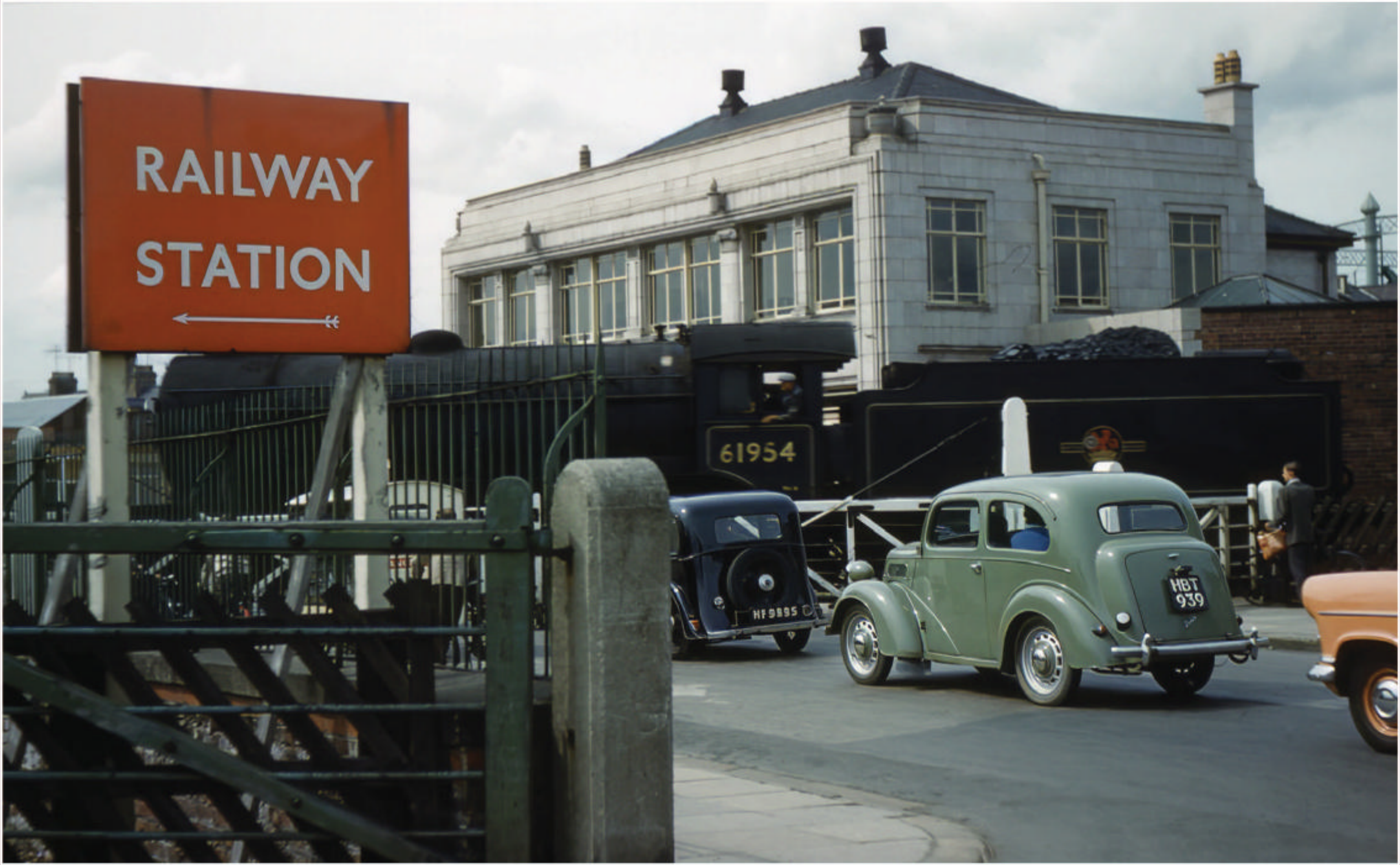

WAIT A MOMENT AT BRIDLINGTON

LNER K3 2-6-0 No.61954 holds up traffic on Bridlington's Quay Street level crossing while making its way light towards the station. At this time, date unspecified but 1957 or '58, the locomotive was based at Sheffield's Darnall shed so was probably visiting with a seasonal train or an excursion from the 'steel city'. The queue consists of what looks like a Morris 8 at the front, followed by a Ford Popular, then something fancier from Ford. A North Eastern Region tangerine sign points the way...
(Colour-Rail.com 360164)

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